

SERVICE MANUAL

COMPACT DISC STEREO SYSTEM BASIC TAPE MECHANISM: 2ZM-3MK2 PR4NM(HS/HR)
BASIC TAPE MECHANISM: 6ZM-3 PR2NM(K/EZ)
BASIC CD MECHANISM: AZG-1 YKZA3RDF(HS/HR)
BASIC CD MECHANISM: AZG-1 YKZD8RDF(K/EZ)

SYSTEM	CD CASSEIVER	SPEAKER	REMOTE CONTROLLER
NSX-BL54	CX-NBL54	SX-WNBL53	RC-ZAS01
NSX-BL56	CX-NBL56	SX-WNBL56	RC-ZAS01

 This Service Manual is the "Revision Publishing" and replaces "Simple Manual" NSX-BL54 <EZ,K> & NSX-BL56<EZ> (S/M Code No. 09-002-429-5T1).

 If requiring information about the CD mechanism, see Service Manual of AZG-1, YKZD8RDF(S/M Code No. 09-001-335-3N6)/YKZA3RDF(S/M Code No. 09-001-335-3NC).



SPECIFICATIONS

Main unit CX-NBL54, CX-NBL56

FM tuner section

Tuning range 87.5 MHz to 108 MHz **Usable sensitivity (IHF)** 16.8 dBf <EZ. K>

13.2 dBf <HS, HR>

Antenna terminal 75 ohms (unbalanced)

AM (MW) tuner section

Tuning range 531 kHz to 1602 kHz (9 kHz step)

530 kHz to 1710 kHz (10 kHz step)

LW tuner section <EZ, K>

SW tuner section <HR>

Tuning range 5.730 MHz to 17.900 MHz

Antenna Wire antenna

Amplifier section

Mid-high frequency amplifier

Power output Rated: 20 W + 20 W (8 ohms,

T.H.D. 1 %, 1 kHz/DIN 45500) Reference : 25 W + 25 W (8 ohms, T.H.D. 10 %, 1 kHz/DIN 45324) DIN MUSIC POWER:

40 W + 40 W<EZ>

Total harmonic distortion 0.1 % (10 W, 1 kHz, 8 ohms, DIN

AUDIO)

Low frequency amplifier

Power output Rated: 60 W + 60 W (6 ohms,

T.H.D. 1 %, 130 Hz/DIN 45500) Reference : 75 W + 75 W (6 ohms, T.H.D. 10 %, 130 Hz/DIN 45324)

DIN MUSIC POWER: 130 W + 130 W <EZ>

Total harmonic distortion 0.1 % (30W, 130 Hz, 6 ohms, DIN

AUDIO)

Inputs VIDEO/AUX: 500 mV

MIC: 1.0 mV (10 k ohms) <HS, HR>

Outputs SPEAKERS HIGH FREQ:

accept speakers of 8 ohms or more

SPEAKERS LOW FREQ: accept speakers of 6 ohms or more

SURROUND SPEAKERS: accept speakers of 8 ohms to 16

ohms

PHONES (stereo jack): accepts headphones of 32 ohms or more

Cassette deck section

Track format 4 tracks, 2 channels stereo

Frequency response 50 Hz - 15000 Hz

Recording system AC bias

Heads Deck 1: Playback head x 1
Deck 2: Recording/playback head

x 1, erase head x 1

Compact disc player section

Laser Semiconductor laser ($\lambda = 780 \text{ nm}$)

D-A converter 1 bit dual

Signal-to-noise ratio 85 dB (1 kHz, 0 dB)
Harmonic distortion 0.05 % (1 kHz, 0 dB)
Wow and flutter Unmeasurable

General

Power requirements 220 V AC, 60 Hz <HS>

230 V AC, 50 Hz <EZ, K> 120 V/220-230 V/240 V AC switchable, 50/60 Hz <HR>

Power consumption 150 W Power consumption in standby mode

If the power-economizing mode is

ECO OFF: 20 W

If the power-economizing mode is ECO ON or ECO AUTO: 0.9 W

Dimensions of main unit 260 x 326 x 345 mm

 $(W \times H \times D)$

Weight of main unit 9.0 kg

Speaker system SX-WNBL53, SX-WNBL56

Speaker system 3 way, Built-in subwoofer (magnetic

shielded type)

Speaker units Subwoofer: 160 mm cone type

Full range: 100 mm cone type

Super tweeter: 20 mm ceramic type

 Impedance
 6 ohms/8 ohms

 Sensitvity
 87 dB/W/m

 Dimensions (W x H x D)
 230 x 324 x 282 mm

Weight 4.8 kg

• Design and specifications are subject to change without notice.

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ACCESSORIES LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。 If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF.	NO	PART NO.	KANF NO.	RI DESCRIPTION
3 3 4 4	8A-NFJ-905-010 8A-NFJ-906-010 8A-NFJ-916-010 8A-NFJ-901-010 8Z-NF8-702-010 87-006-268-010 87-006-269-010 87-A90-118-010 87-A90-119-010	IB, EZ (91 IB, EZ (91 IB, H (ECA RC UNIT, ANT, LOOF ANT, LOOF ANT, WIRE FEEDER-A	.) M 54<4EZ> .) M 56 RDS<6EZ> .) M <hr/> RC-ZAS01	<u>A</u>	6 6 7	87-A91-017-01 87-099-811-01 87-B30-274-01	.0	PLUG, CONVERSION JT-0476 <hr/> PLUG, ADPTR CONV(K) <k> BAT, R6P ATC<hs></hs></k>

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynling laserståling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

Precaution to replace Optical block

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

 After the connection, remove solder shown in the figure below.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

ATTENTION

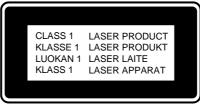
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL!

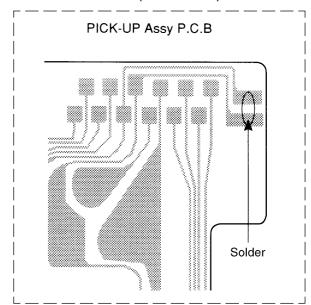
Usynlig laserståling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.

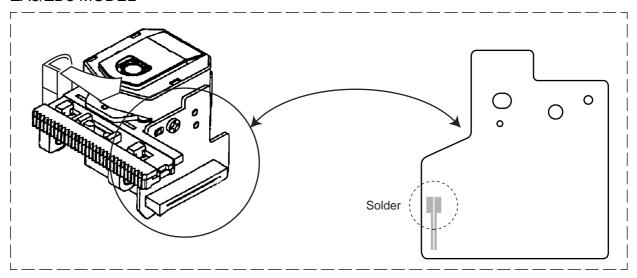
The CLASS 1 LASER PRODUCT label is located on the rear exterior.



ZA3/ZA4 MODEL(KSS-213F)



ZA8/ZD8 MODEL



NOTE ON BEFORE STARTING REPAIR

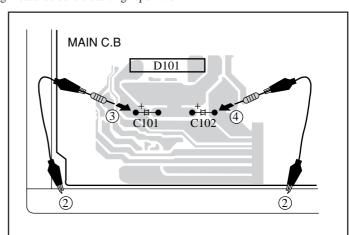
1. Forced discharge of electrolytic capacitor of power supply block

When repair is going to be attempted in the set that uses relay circuit in the power supply block, electric potential is kept charged across the electrolytic capacitors (C101, 102) even though AC power cord is removed. If repair is attempted in this condition, secondary defect can occur.

In order to prevent the secondary trouble, perform the following measures before starting repair work.

Discharge procedure

- (1) Remove the AC power cord.
- 2 Connect a discharging resistor at an end of lead wire that has clips at both ends. Connect the other end of the lead wire to metal chassis.
- 3 Contact the other end of the discharging resistor to the positive (+) side (+VH) of C101. (For two seconds)
- (4) Contact the same end of the discharging resistor as step 3 to the negative (-) side (-VH) of C102 in the same way. (For two seconds)
- (5) Check that voltage across C101 and C102 has decreased to 1 V or less using a multimeter or an oscilloscope.



Select a discharging resistor referring to the following table.

Charging voltage (V) (C101, 102)	Discharging resistor (Ω)	Rated power (W)	Parts number
25-48	100	3	87-A00-247-090
49-140	220	5	87-A00-232-090

Note: The reference numbers (C101, C102) of the electrolytic capacitors can change depending on the models. Be sure to check the reference numbers of the charging capacitors on schematic diagram before starting the discharging work.

2. Check items before exchanging the MICROCOMPUTER

Be sure to check the following items before exchanging the MICROCOMPUTER. Exchange the MICROCOMPUTER after confirming that the MICROCOMPUTER is surely defective.

2-1. Regarding the HOLD terminal of the MICROCOMPUTER

When the HOLD terminal (INPUT) of the MICROCOMPUTER is "H", the MICROCOMPUTER is judged to be operating correctly. When this terminal is "L", the main power cannot be turned on. Therefore, be sure to check the terminal voltage of the HOLD terminal before exchange.

When the MICROCOMPUTER is not defective, the HOLD terminal can also go "L" when the POWER AMPLIFIER has any abnormalities that triggers the abnormality detection circuit on the MAIN C. B. that sets the HOLD terminal to "L".

Good or no good judgement of the MICROCOMPUTER

- 1 Turn on the AC main power.
- ② Confirm that the main power is turned on and the HOLD terminal of the MICROCOMPUTER keeps the "H" level or not.
- When the HOLD terminal is "L" level, the abnormality detection circuit is judged to be working correctly and the MICROCOMPUTER is judged to be good.

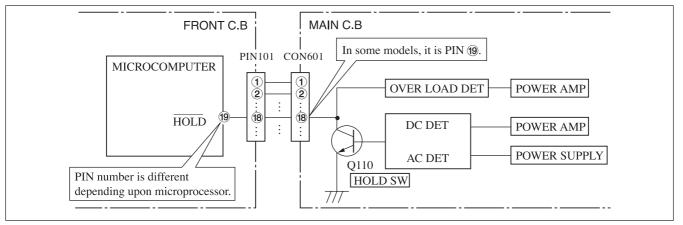


Fig-2-1

In such a case, check also if the POWER AMPLIFIER circuit or power supply circuit has any abnormalities or not.

2-2. Regarding reset

There are cases that the machine does not work correctly because the MICROCOMPUTER is not reset even though the AC power cord is re-inserted, or the software reset (pressing the STOP key + POWER key) is performed.

When the above described phenomenon occurs, it can lead to wrong judgement as if the MICROCOMPUTER is defective and to exchange the MICROCOMPUTER. In such a case, perform the forced-reset by the following procedure and check good or no good of the MICROCOMPUTER.

(1) Remove the AC power cord.

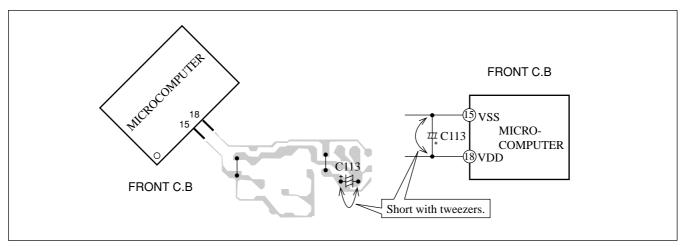


Fig-2-2

- (2) Short both ends of the electrolytic capacitor C113 that is connected to VDD of the MICROCOMPUTER with tweezers.
- 3 Connect the AC power cord again. If the MICROCOMPUTER returns to the normal operation, the MICROCOMPUTER is good.

Note: The reference number or MICROCOMPUTER pin number of transistor (Q110) and electrolytic capacitor (C113) can change depending on the models. Be sure to check the reference numbers on schematic diagram before starting the discharging work.

2-3. Confirmation of soldering state of MICROCOMPUTER

Check the soldering state of the MICROCOMPUTER in addition to the above described procedures. Be sure to exchange the MICROCOMPUTER after surely confirming that the trouble is not caused by poor soldering but the MICROCOMPUTER itself.

ELECTRICAL MAIN PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。 If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. N	O PART NO.	KANF NO.	
IC				C0009			C-CAP,S 0.1-50 Z F
	87-020-454-01	0 IC,DN6	851	C0010 C0011			C-CAP,S 0.1-50 Z F C-CAP,S 0.1-50 Z F
	87-A21-417-01	0 IC,ST	490-310	C0011			C-CAP,S 0.1-50 Z F
	8A-NF8-614-11 8A-NF8-613-01		.C866560W-5P89<56EZ> .C866548V-5P87 <except 56ez<="" td=""><td>C0015</td><td>87-012-368</td><td>-080</td><td>C-CAP,S 0.1-50 Z F</td></except>	C0015	87-012-368	-080	C-CAP,S 0.1-50 Z F
	87-A21-396-01		(490-040	C0016	87-012-368-	-080	C-CAP,S 0.1-50 Z F
	07 301 600 01	0 TO 0D0	1 440 1 N	C0017	87-012-368	-080	C-CAP,S 0.1-50 Z F
	87-A21-629-01 87-A21-419-04		G-442-1-N IJM14558MD-TE2	C0018 C0019			C-CAP,S 0.1-50 Z F CAP,E 3300-65 M SMG
	87-A21-577-04		161506FP <hr/>	C0020			CAP, E 3300-65 M SMG
	87-A21-023-04 87-070-289-04		BA3835F <except hr=""></except>	C0021	87-016-051	-000	CAP,E 2200-35 M SMG
				C0022	87-016-051		CAP, E 2200-35 M SMG
	87-A21-401-04 87-A21-560-01		161503FP 844T-A	C0023 C0024			CAP,E 4700-35 M SMG CAP,E 4700-35 M SMG
	87-A20-440-04		.844L-A U1920FS<56EZ>	C0025			CAP,E 47-50 M 11L SME
	87-070-127-11	0 IC,LC	'2131D	annac	07 010 047	000	CAD E 100 EO M CME
				C0026 C0030			CAP,E 100-50 M SME CAP,E 100-63
TRANSISTO)R			C0031			CAP, E 100-10 M 11L SME
	87-026-451-08	0 TR,2SA	1933S <hs,hr></hs,hr>	C0032 C0034			C-CAP,S 0.01-25 K B C2012 CAP,E 47-25 M 11L SME
	87-026-609-08		1266GR				
	89-213-702-01 87-026-610-08		31370E 3198GR	C0035 C0036			CAP,E 47-16 M 11L SME CAP,E 330-16 M SME
	87-A30-076-08	0 C-TR,2	SC3052F	C0038	87-010-197	-080	C-CAP,S 0.01-25 K B C2012
	87-A30-075-08	0 C-TR,2	SA1235F	C0060 C0061			CAP,E 3.3-50 M 11L SME CAP,E 47-25 M 11L SME
	87-026-245-08	0 TR,DTC	C114ES				
	87-A30-198-08 87-A30-107-07		3199GR MBT5401	C0101 C0102			C-CAP,S 2700P-50 K B GRM C-CAP,S 2700P-50 K B GRM
	87-A30-106-04		MBT5551	C0102			CAP,E 0.22-50 M 11L SME
	87-A30-087-08	0 C-FET	2SK2158	C0104 C0107			CAP, E 10.50 M 11L SME
	87-A30-074-08	O C-TR, F	T1P 141C	C0107	87-010-405	.000	CAP,E 10-50 M 11L SME
	87-A30-318-08 87-A30-091-08			C0108			CAP, E 10-50 M 11L SME
	87-A30-329-08			C0109 C0110			C-CAP,S 1200P-50 K B GRM <hr/> C-CAP,S 1200P-50 K B GRM <hr/>
	87-A30-090-08	0 FET,28	*V	C0111			CAP, E 10-50 M 11L SME
	87-A30-090-08		T1N 441C	C0112	87-010-405	-080	CAP,E 10-50 M 11L SME
	87-A30-468-08 87-A30-484-08		RC102S-RTK RA102S	C0113			CAP, E 10-63 M VX
	89-333-317-88		3331 (T/U)	C0114 C0119			CAP,E 10-63 M VX C-CAP,S 0.01-25 K B C2012
	07 320 260 04	0 0 0 0	201461 111	C0120	87-010-197	-080	C-CAP,S 0.01-25 K B C2012
	87-A30-269-04 89-327-143-08		2SJ461-T1 SC27140	C0123	87-010-176	-080	C-CAP,S 680P-50 J SL <k,54ez,56ez></k,54ez,56ez>
	87-A30-489-08		RA107S	C0124			C-CAP,S 680P-50 J SL <k,54ez,56ez></k,54ez,56ez>
	87-A30-072-08 87-A30-086-07		TT1P 144C <hr/> SD1306E <except hs=""></except>	C0125 C0126			C-CAP,S 0.1-50 Z F C-CAP,S 0.1-50 Z F
	00 500 600 00	0 G DDD	OGWOCOE ENGERE HA	C0127	87-012-368	-080	C-CAP,S 0.1-50 Z F
	89-503-602-08 87-A30-234-08		2SK360E <except hs=""></except>	C0128	87-012-368	-080	C-CAP,S 0.1-50 Z F
				C0129			C-CAP,S 0.015-50 Z F <k,54ez,56ez></k,54ez,56ez>
DIODE				C0130 C0131			C-CAP,S 0.015-50 Z F <k,54ez,56ez> C-CAP,S 0.01-25 K B <k,54ez,56ez></k,54ez,56ez></k,54ez,56ez>
	05 340 202 00	0 DIODE	1315 4 0 0 OU (FO 0)	C0132	87-010-197	-080	C-CAP,S 0.01-25 K B <k,54ez,56ez></k,54ez,56ez>
	87-A40-393-09 87-020-465-08		1N5402GW (F20) 1SS133	C0133	87-010-186	-080	C-CAP,S 4700P-50 K B C2012
	87-A40-547-09		D5SBA20	C0140			C-CAP,S 2200P-50 K B C2012
	87-A40-455-08 87-A40-553-08		RL203 GW 1N4003 LES	C0141 C0203			C-CAP,S 0.1-25 Z F C2012 C-CAP,S 2200P-50 K B C2012
				C0204			C-CAP,S 2200P-50 K B C2012
	87-A40-776-08 87-A40-764-08		UZ27BSD UZ10BSC	C0205	87-010-179	-080	C-CAP,S 1200P-50 K B GRM <hr/>
	87-A40-270-08	0 C-DIO	DE,MC2838	C0205	87-012-140		C-CAP,S 470P-50 J CH <except hr=""></except>
	87-A40-313-08 87-A40-269-08		DE,MC2840 DE,MC2836	C0206 C0206			C-CAP,S 1200P-50 K B GRM <hr/> C-CAP,S 470P-50 J CH <except hr=""></except>
				C0209			CAP, E 2.2-50 M 11L SME
	87-A40-768-08 87-A40-752-08		UZ16BSA UZ6.2BSC	C0210	87-010-402	-080	CAP, E 2.2-50 M 11L SME
	87-A40-802-08	0 ZENER,	UZ5.1BSC	C0211	87-010-184	-080	C-CAP,S 3300P-50 K B C2012
	87-A40-739-08 87-017-149-08		UZ2.7BSA HZS6A2L	C0212 C0213			C-CAP,S 3300P-50 K B C2012 CAP,E 2.2-50 M 11L SME
		,		C0213			CAP,E 2.2-50 M 11L SME
MAIN C.B				C0217			CAP,E 10-50 M 11L SME
				C0218	87-010-405	-080	CAP,E 10-50 M 11L SME
C0003 C0004	87-012-368-08 87-012-368-08		S 0.1-50 Z F S 0.1-50 Z F	C0220			CAP,E 10-50 M 11L SME
C0005	87-012-368-08	0 C-CAP,	S 0.1-50 Z F	C0223 C0224			C-CAP,S 0.01-50 Z F C2012 C-CAP,S 0.01-50 Z F C2012
C0006	87-012-368-08	U C-CAP,	S 0.1-50 Z F	C0228	87-010-405	-080	CAP,E 10-50 M 11L SME

REF. NO		NRI DESCRIPTION O.	REF. NO		NRI DESCRIPTION O.
C0229	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	C0612	87-010-545-080	CAP,E 0.22-50 M 11L SME
C0230	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	C0613	87-010-545-080	CAP,E 0.22-50 M 11L SME
C0231	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	C0614	87-010-545-080	CAP,E 0.22-50 M 11L SME
C0232	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	C0615	87-010-154-080	C-CAP,S 10P-50 D CH GRM
C0233	87-010-190-080	C-CAP,S 0.01-50 Z F <k,54ez,56ez></k,54ez,56ez>	C0616	87-010-385-080	CAP,E 220-25 M SME
C0234	87-010-190-080	C-CAP,S 0.01-50 Z F <k,54ez,56ez></k,54ez,56ez>	C0617	87-010-385-080	CAP,E 220-25 M SME CAP,E 10-50 M 11L SME CAP,E 100-10 M 11L SME C-CAP,S 0.1-25 K B C-CAP,S 3900P-50 K B
C0237	87-010-322-080	C-CAP,S 100P-50 J CH <k,54ez,56ez></k,54ez,56ez>	C0618	87-010-405-080	
C0238	87-010-322-080	C-CAP,S 100P-50 J CH <k,54ez,56ez></k,54ez,56ez>	C0620	87-010-263-080	
C0239	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	C0630	87-016-669-080	
C0270	87-010-197-080	C-CAP,S 0.01-25 K B <k,54ez,56ez></k,54ez,56ez>	C0631	87-010-185-080	
C0301	87-010-178-080	C-CAP,S 1000P-50 K B C2012	C0632	87-010-185-080	C-CAP,S 3900P-50 K B C-CAP,S 0.033-25 K B GRM C-CAP,S 0.033-25 K B GRM C-CAP,S 1000P-50 K B <hs,hr> C-CAP,S 330P-50 J CH<k,54ez,56ez></k,54ez,56ez></hs,hr>
C0302	87-010-178-080	C-CAP,S 1000P-50 K B C2012	C0633	87-016-369-080	
C0303	87-010-178-080	C-CAP,S 1000P-50 K B C2012	C0634	87-016-369-080	
C0304	87-010-178-080	C-CAP,S 1000P-50 K B C2012	C0661	87-010-178-080	
C0307	87-010-263-080	CAP,E 100-10 M 11L SME	C0661	87-012-157-080	
C0308	87-010-263-080	CAP,E 100-10 M 11L SME	C0662	87-010-178-080	C-CAP,S 1000P-50 K B <hs,hr> C-CAP,S 330P-50 J CH<k,54ez,56ez> C-CAP,S 1500P-50 K B<k,54ez,56ez> C-CAP,S 1500P-50 K B<k,54ez,56ez> C-CAP,S 0.1-25 Z F C2012<hs,hr></hs,hr></k,54ez,56ez></k,54ez,56ez></k,54ez,56ez></hs,hr>
C0309	87-010-318-080	C-CAP,S 47P-50 J CH GRM	C0662	87-012-157-080	
C0310	87-010-318-080	C-CAP,S 47P-50 J CH GRM	C0669	87-010-180-080	
C0313	87-010-188-080	C-CAP,S 6800P-50 K B C2012	C0670	87-010-180-080	
C0314	87-010-188-080	C-CAP,S 6800P-50 K B C2012	C0671	87-010-196-080	
C0315	87-010-263-080	CAP,E 100-10 M 11L SME	C0672	87-010-196-080	C-CAP,S 0.1-25 Z F C2012 <hs,hr></hs,hr>
C0317	87-010-546-080	CAP,E 0.33-50 M 11L SME	C0673	87-010-182-080	C-CAP,S 2200P-50 K B <hs,hr></hs,hr>
C0318	87-010-546-080	CAP,E 0.33-50 M 11L SME	C0677	87-010-197-080	C-CAP,S 0.01-25 K B C2012
C0326	87-010-198-080	C-CAP,S 0.022-25 K B C2012	C0771	87-010-263-080	CAP,E 100-10 M 11L SME
C0327	87-012-368-080	C-CAP,S 0.1-50 Z F	C0772	87-010-197-080	C-CAP,S 0.01-25 K B C2012
C0360	87-010-401-080	CAP,E 1-50 M 11L SME	C0779	87-010-186-080	C-CAP,S 4700P-50 K B <k,54ez,56ez> C-CAP,S 4700P-50 K B<k,54ez,56ez> C-CAP,S 0.01-25 K B C2012 C-CAP,S 0.01-25 K B C2012 C-CAP,S 0.01-25 K B C2012</k,54ez,56ez></k,54ez,56ez>
C0365	87-010-197-080	C-CAP,S 0.01-25 K B <k,54ez,56ez></k,54ez,56ez>	C0780	87-010-186-080	
C0399	87-012-140-080	C-CAP,S 470P-50 J CH	C0782	87-010-197-080	
C0401	87-010-544-080	CAP,E 0.1-50 M 11L SME	C0783	87-010-197-080	
C0402	87-010-544-080	CAP,E 0.1-50 M 11L SME	C0784	87-010-197-080	
C0403	87-010-321-080	C-CAP,S 82P-50 J CH	C0785	87-010-197-080	C-CAP,S 0.01-25 K B C2012
C0404	87-010-321-080	C-CAP,S 82P-50 J CH	C0786	87-010-197-080	C-CAP,S 0.01-25 K B C2012
C0405	87-010-197-080	C-CAP,S 0.01-25 K B C2012	C0788	87-010-149-080	C-CAP,S 5P-50 C CH GRM
C0406	87-010-197-080	C-CAP,S 0.01-25 K B C2012	C0789	87-A10-801-080	C-CAP,S 0.022-16 J B CM <hr/>
C0407	87-010-197-080	C-CAP,S 0.01-25 K B C2012	C0789	87-A11-532-080	C-CAP,S 0.022-50 J B <except hr=""></except>
C0408	87-010-197-080	C-CAP,S 0.01-25 K B C2012	C0790	87-A10-801-080	C-CAP,S 0.022-16 J B CM <hr/> C-CAP,S 0.022-50 J B <except hr=""> C-CAP,S 0.1-25 Z F C2012 C-CAP,S 0.01-25 K B C2012 CAP,E 4.7-50 M 11L SME</except>
C0409	87-010-182-080	C-CAP,S 2200P-50 K B C2012	C0790	87-A11-532-080	
C0410	87-010-182-080	C-CAP,S 2200P-50 K B C2012	C0791	87-010-196-080	
C0411	87-010-405-080	CAP,E 10-50 M 11L SME	C0792	87-010-197-080	
C0412	87-010-405-080	CAP,E 10-50 M 11L SME	C0793	87-010-404-080	
C0452	87-010-382-080	CAP,E 22-25 M 11L SME	C0794	87-012-140-080	C-CAP,S 470P-50 J CH <k,54ez></k,54ez>
C0453	87-010-183-080	C-CAP,S 2700P-50 K B GRM	C0794	87-012-155-080	C-CAP,S 180P-50 J CH GRM<56EZ>
C0454	87-010-183-080	C-CAP,S 2700P-50 K B GRM	C0795	87-010-197-080	C-CAP,S 0.01-25 K B C2012
C0455	87-010-183-080	C-CAP,S 2700P-50 K B GRM	C0796	87-010-197-080	C-CAP,S 0.01-25 K B C2012
C0456	87-010-197-080	C-CAP,S 0.01-25 K B C2012	C0797	87-010-405-080	CAP,E 10-50 M 11L SME
C0458	87-010-178-080	C-CAP,S 1000P-50 K B C2012	C0798	87-010-197-080	C-CAP,S 0.01-25 K B C2012
C0459	87-010-175-080	C-CAP,S 560P-50 J SL	C0799	87-010-407-080	CAP,E 33-50 M 11L SME
C0460	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	C0800	87-012-369-080	C-CAP,S 0.047-50 Z F
C0461	87-012-158-080	C-CAP,S 390P-50 J CH GRM	C0801	87-010-403-080	CAP,E 3.3-50 M 11L SME
C0462	87-012-158-080	C-CAP,S 390P-50 J CH GRM	C0802	87-010-194-080	C-CAP,S 0.047-25 Z F
C0507	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	C0803	87-010-198-080	C-CAP,S 0.022-25 K B C2012
C0508	87-010-178-080	C-CAP,S 1000P-50 K B C2012	C0804	87-010-263-080	CAP,E 100-10 M 11L SME
C0509	87-A10-300-080	CAP,M 0.027-50 J	C0807	87-010-400-080	CAP,E 0.47-50 M 11L SME
C0510	87-A10-300-080	CAP,M 0.027-50 J	C0808	87-010-401-080	CAP,E 1-50 M 11L SME
C0515	87-A10-300-080	CAP,M 0.027-50 J	C0809	87-010-401-080	CAP,E 1-50 M 11L SME
C0516	87-A10-300-080	CAP,M 0.027-50 J	C0810	87-010-196-080	C-CAP,S 0.1-25 Z F C2012
C0518	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	C0814	87-010-197-080	C-CAP,S 0.01-25 K B C2012
C0519	87-010-401-080	CAP,E 1-50 M 11L SME	C0815	87-010-400-080	CAP,E 0.47-50 M 11L SME
C0520	87-010-401-080	CAP,E 1-50 M 11L SME	C0816	87-010-400-080	CAP,E 0.47-50 M 11L SME
C0521	87-010-546-080	CAP,E 0.33-50 M 11L SME	C0818	87-010-180-080	C-CAP,S 1500P-50 K B <k,54ez,56ez></k,54ez,56ez>
C0522 C0523 C0524 C0525 C0526	87-010-546-080 87-010-545-080 87-010-545-080 87-010-545-080 87-010-545-080	CAP,E 0.33-50 M 11L SME CAP,E 0.22-50 M 11L SME	C0821 C0823 C0823 C0824 C0825	87-010-405-080 87-010-177-080 87-012-349-080 87-010-404-080 87-010-596-080	CAP,E 10-50 M 11L SME C-CAP,S 820P-50 J SL <hs,hr> C-CAP,S 1000P-50 J CH<k,54ez,56ez> CAP,E 4.7-50 M 11L SME C-CAP,S 0.047-16 K R C2012</k,54ez,56ez></hs,hr>
C0605	87-010-179-080	C-CAP,S 1200P-50 K B GRM	C0831	87-010-406-080	CAP,E 22-50 M 11L SME <k,54ez,56ez></k,54ez,56ez>
C0606	87-010-179-080	C-CAP,S 1200P-50 K B GRM	C0842	87-010-197-080	C-CAP,S 0.01-25 K B C2012
C0609	87-010-213-080	C-CAP,S 0.015-25 K B GRM	C0844	87-010-197-080	C-CAP,S 0.01-25 K B C2012
C0610	87-010-213-080	C-CAP,S 0.015-25 K B GRM	C0850	87-010-260-080	CAP,E 47-25 M 11L SME
C0611	87-010-545-080	CAP,E 0.22-50 M 11L SME	C0851	87-010-197-080	C-CAP,S 0.01-25 K B C2012

REF. NO		ANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C0852 C0853 C0858 C0859 C0860	87-010-197-080 87-010-197-080 87-010-196-080 87-010-196-080 87-010-197-080	C-CAP, S C-CAP, S C-CAP, S C-CAP, S C-CAP, S	0.01-25 K B C2012 0.01-25 K B C2012 0.1-25 Z F C2012 0.1-25 Z F C2012 0.01-25 K B C2012	J0203 J0204 J0602 J0831 J0832	87-A60-238-010 87-A61-153-010 87-A60-881-010 87-A60-202-010 87-A60-403-010	JACK, PIN JACK, PIN TERMINAI	L,SP 4P (MSC) N 4P R/W(BL) (SEPA) KM N 2P MSP 242V05 PBSN L,ANT 4P <hs,hr> L,ANT PAL 2P <k,54ez,56ez></k,54ez,56ez></hs,hr>
C0869 C0870 C0871 C0872 C0873	87-010-197-080 87-018-131-080 87-012-156-080 87-012-156-080 87-012-140-080	C-CAP,S CAP,TC U C-CAP,S C-CAP,S	0.01-25 K B C2012<56EZ> 1000P-50 K B UP050<56EZ> 220P-50 J CH GRM<56EZ> 220P-50 J CH GRM<56EZ> 470P-50 J CH<56EZ>	J0940 L0101 L0101 L0102 L0102	87-A60-633-010 87-003-383-010 87-A50-610-010 87-003-383-010 87-A50-610-010	COIL, 1UH COIL, 1UH COIL, 1UH	H 2.5MM JMT <hr/> H K.EXCEPT HR> H K(MDEC) <hr/> H K(EXCEPT HR> H K(EXCEPT HR> H K(MDEC) <hr/>
C0874 C0875 C0876 C0877 C0878	87-010-405-080 87-010-196-080 87-010-405-080 87-010-197-080 87-010-316-080	CAP,E 10 C-CAP,S CAP,E 10 C-CAP,S C-CAP,S	-50 M 11L SME<56EZ> 0.1-25 Z F C2012<56EZ> -50 M 11L SME<56EZ> 0.01-25 K B C2012<56EZ> 33P-50 J CH GRM<56EZ>	L0201 L0201 L0202 L0202 L0451	87-003-383-010 87-A50-610-010 87-003-383-010 87-A50-610-010 87-007-342-010	COIL, 1UF COIL, 1UF COIL, 1UF	H K <except hr=""> H K(MDEC)<hr/> K(MDEC)<hr/> K<except hr=""> H K(MDEC)<hr/> C 85KHZ BIAS</except></except>
C0879 C0940 C0941 C0942 C0943	87-010-314-080 87-010-197-080 87-010-314-080 87-010-149-080 87-010-197-080		22P-50 J CH GRM<56EZ> 0.01-25 K B <except hs=""> 22P-50 J CH GRM-HR> 5P-50 C CH<k,54ez,56ez> 0.01-25 K B C2012<hr/></k,54ez,56ez></except>		87-A50-608-010 87-A91-551-010 87-A91-552-010 87-005-847-080 87-005-847-080	FLTR, PCI FLTR, CFN COIL, 2.2	DET-N(TOK) 7JZH-450 L <except hr=""> 4T-450AL <hr/> PUH K CECS 2UH K CECS</except>
C0945 C0946 C0947 C0948 C0948	87-010-197-080 87-010-971-080 87-010-197-080 87-010-148-080 87-012-140-080	C-CAP,S C-CAP,S C-CAP,S C-CAP,S	0.01-25 K B C2012 <hr/> 4700P-50 J B <hr/> 0.01-25 K B <except hs=""> 4P-50 C CH GRM<hr/> 470P-50 J CH<k,54ez,56ez></k,54ez,56ez></except>	L0861 L0941 L0941 L0942 L0942	87-005-847-080 87-A50-020-010 87-A50-022-010 87-A50-019-010 87-A50-550-010	COIL, ANT COIL, ANT	ZUH K CECS<56EZ> F LW 252KHZ <k,54ez,56ez> F SW 7.96MHZ<hr/> C LW 856KHZ<k,54ez,56ez> C SW-2N(COI)<hr/></k,54ez,56ez></k,54ez,56ez>
C0952 C0953 C0954 C0956 C0957	87-010-197-080 87-010-197-080 87-010-400-080 87-010-263-080 87-010-311-080		0.01-25 K B <except hs=""> 0.01-25 K B C2012<hr/> 47-50 M 11L SME<hr/> 0-10 M 11L SME<hr/> 12P-50 J CH<k,54ez,56ez></k,54ez,56ez></except>		87-A50-522-080 87-A50-159-010 8A-NF8-667-010 8A-NF8-668-010 87-A50-430-010	COIL,10M COIL,AM COIL,AM	H K CEC <hr/> MH K C2BcHR> PACK 4 (TOK) <hs> PACK 2 (TOK)<k,54ez,56ez> FMW(3BSW)<hr/></k,54ez,56ez></hs>
C0958 C0959 C0960 C0961 C0962	87-010-197-080 87-010-196-080 87-010-196-080 87-010-152-080 87-010-401-080	C-CAP,S C-CAP,S C-CAP,S C-CAP,S CAP,E 1-	0.01-25 K B <k,54ez,56ez> 0.1-25 Z F C2012 0.1-25 Z F<except hr=""> 8P-50 D CH GRM<hs> 50 M 11L SME<except hs=""></except></hs></except></k,54ez,56ez>	L0953 R0129 R0130 R0143 R0143	87-A50-431-010 87-A00-257-080 87-A00-257-080 87-A00-439-050 87-A00-440-050	RES,M/F RES,M/F RES,180-	C MW(3BSW) <hr/> 0.15-1W J 0.15-1W J 0.15-1W J -1/2W J RP <k,54ez,56ez> -1/2W J RP<hs,hr></hs,hr></k,54ez,56ez>
C0963 C0964 C0971 C0972 C0973	87-015-785-080 87-010-854-080 87-010-381-080 87-010-404-080 87-010-197-080	C-CAP,S	.1-25 Z F C3216 560P-50 J CH <hr/> 0-16 M SME 7-50 M 11L SME 0.01-25 K B C2012	R0144 R0144 R0145 R0145 R0146	87-A00-439-050 87-A00-440-050 87-A00-439-050 87-A00-440-050 87-A00-439-050	RES,220- RES,180- RES,220-	-1/2W J RP <k,54ez,56ez> -1/2W J RP<hs,hr> -1/2W J RP<k,54ez,56ez> -1/2W J RP<hs,hr> -1/2W J RP<k,54ez,56ez></k,54ez,56ez></hs,hr></k,54ez,56ez></hs,hr></k,54ez,56ez>
C0974 C0979 C0981 C0982 C0983	87-010-197-080 87-010-322-080 87-010-260-080 87-010-196-080 87-010-197-080	C-CAP,S CAP,E 47 C-CAP,S	0.01-25 K B C2012 100P-50 J CH GRM -25 M 11L SME 0.1-25 Z F C2012 0.01-25 K B C2012	R0146 R0233 R0234 R0790 R0991	87-A00-440-050 87-A00-258-080 87-A00-258-080 87-010-197-080 87-010-322-080	RES,M/F RES,M/F C-CAP,S	-1/2W J RP <hs,hr> 0.22-1W J 0.22-1W J 0.01-25 K B C2012 100P-50 J CH GRM</hs,hr>
C0984 C0985 C0987 C0989 C0991	87-010-197-080 87-010-322-080 87-010-197-080 87-010-197-080 87-010-312-080	C-CAP,S C-CAP,S C-CAP,S	0.01-25 K B C2012 100P-50 J CH <k,54ez,56ez> 0.01-25 K B C2012 0.01-25 K B<except hs=""> 15P-50 J CH GRM</except></k,54ez,56ez>		87-010-322-080 87-010-322-080 87-A90-432-080 87-A90-432-080 87-011-254-080	C-CAP,S SFR,30K SFR,30K	100P-50 J CH GRM 100P-50 J CH GRM H NVZ6TLTA H NVZ6TLTA CER 20P 4.0X4.5 ECR <hr/>
C0992 C0993 C0995 C0997 C0998	87-010-312-080 87-010-178-080 87-010-178-080 87-010-196-080 87-010-260-080	C-CAP,S C-CAP,S C-CAP,S C-CAP,S CAP,E 47	15P-50 J CH GRM 1000P-50 K B C2012 1000P-50 K B C2012 0.1-25 Z F C2012 -25 M 11L SME	TC0942 TC0943 WH0001 X0861 X0991	87-011-253-080 87-011-253-080 87-A91-179-010 87-A70-091-010 87-A70-061-010	TRIMMER, HLDR,WIF VIB,XTAI	CER 30P 4.0X4.5 <k,54ez,56ez> CER 30P 4.0X4.5<hr/> RE 2.5-11P L 4.332MHZ CSA-309<56EZ> L 4.500MHZ CSA-309</k,54ez,56ez>
C0999 CF0831 CF0831	87-A11-132-080 87-008-261-010 87-008-423-010	FLTR,CF FLTR,CF	0.01-50 K B SFE10.7MA5 <hs,hr> SFE10.7MS3G-A<k,54ez,56ez></k,54ez,56ez></hs,hr>	FRONT C.B		g grp g	1000 50 7 60 600
CF0832 CF0832 CN0301	82-785-747-010 87-008-261-010 87-A60-620-010	FLTR, CF	HY,R <k,54ez,56ez> SFE10.7MA5<hs,hr> V 2MM JMT</hs,hr></k,54ez,56ez>	C0201 C0202 C0203 C0204	87-010-322-080 87-010-322-080 87-010-322-080 87-010-322-080	C-CAP,S C-CAP,S C-CAP,S	100P-50 J CH GRM 100P-50 J CH GRM 100P-50 J CH GRM 100P-50 J CH GRM
CN0351 CN0601 CN0602 CNA0001	87-A60-625-010 87-099-719-010 87-A60-131-010 8A-NF8-654-010	CONN, 30P	V 2MM JMT H BLK TYK-B(X) V FE Y,11P TID-A(480)	C0205 C0206 C0207	87-010-322-080 87-010-322-080 87-010-322-080	C-CAP,S C-CAP,S	100P-50 J CH GRM 100P-50 J CH GRM 100P-50 J CH GRM
D0951 FFC0602	87-A40-618-080 88-906-251-110 A8-6ZA-195-130	VARI-CAP FF-CABLE	,SVC 348(S/T) <hr/>	C0208 C0209 C0210	87-010-322-080 87-010-322-080 87-010-322-080	C-CAP,S	100P-50 J CH GRM 100P-50 J CH GRM 100P-50 J CH GRM
	A8-8ZA-191-030 87-A60-483-010	8ZA-1 YF	EUNM <hs,hr> 6.3 BLK ST W/S KM</hs,hr>	C0211 C0251	87-010-322-080 87-010-405-040		100P-50 J CH GRM 0-50 M 11L SME

REF. NO		NRI DE	ESCRIPTION	REF. NO	PART NO.	Kanri No.	DESCRIPTION
C0253 C0254 C0255 C0256 C0259	87-010-196-080 87-012-369-080 87-010-560-040 87-010-405-040 87-010-405-040	C-CAP,S 0.1 C-CAP,S 0.0 CAP,E 10-50 CAP,E 10-50 CAP,E 10-50	0 M 11L SME	LED0607	87-A40-619-080 87-A40-619-080 87-A40-619-080 87-A90-095-080 87-A91-024-180	LED, SLR LED, SLR SW, TACT	-56PT-TE7-W GRN -56PT-TE7-W GRN -56PT-TE7-W GRN EVQ11G04M <except hr=""> KSHG611BT<hr/></except>
C0264 C0273 C0274 C0301 C0302	87-A11-148-080 87-010-178-080 87-010-178-080 87-010-182-080 87-010-196-080	C-CAP,S 100 C-CAP,S 220	.1-50 Z F 00P-50 K B C2012 00P-50 K B C2012 00P-50 K B C2012 1-25 Z F C2012	S0402 S0402 S0403 S0403 S0404	87-A90-095-080 87-A91-024-180 87-A90-095-080 87-A91-024-180 87-A90-095-080	SW, TACT SW, TACT SW, TACT	EVQ11G04M <except hr=""> KSHG611BT<hr/> EVQ11G04M<except hr=""> KSHG611BT<hr/> EVQ11G04M<except hr=""></except></except></except>
C0303 C0312 C0314 C0315 C0316	87-010-196-080 87-010-498-040 87-010-196-080 87-010-196-080 87-010-196-080	CAP,E 10-16 C-CAP,S 0.1 C-CAP,S 0.1	1-25 Z F C2012 6 M 5L SRE 1-25 Z F C2012 1-25 Z F C2012 1-25 Z F C2012	\$0404 \$0405 \$0405 \$0406 \$0406	87-A91-024-180 87-A90-095-080 87-A91-024-180 87-A90-095-080 87-A91-024-180	SW, TACT SW, TACT SW, TACT	KSHG611BT <hr/> EVQ11G04M <except hr=""> KSHG611BT<hr/> EVQ11G04M<except hr=""> KSHG611BT<hr/></except></except>
C0321 C0322 C0325 C0326 C0332	87-012-393-080 87-010-400-040 87-A10-189-040 87-A10-189-040 87-010-178-080	CAP,E 0.47- CAP,E 220-1 CAP,E 220-1		S0407 S0407 S0408 S0408 S0409	87-A90-095-080 87-A91-024-180 87-A90-095-080 87-A91-024-180 87-A90-095-080	SW, TACT SW, TACT SW, TACT	EVQ11G04M <except hr=""> KSHG611BT<hr/> EVQ11G04M<except hr=""> KSHG611BT<hr/> EVQ11G04M<except hr=""></except></except></except>
C0334 C0335 C0336 C0339 C0340	87-010-312-080 87-012-140-080 87-012-155-080 87-012-156-080 87-010-197-080	C-CAP,S 470 C-CAP,S 180 C-CAP,S 220	P-50 J CH GRM OP-50 J CH OP-50 J CH GRM OP-50 J CH GRM O1-25 K B C2012	S0409 S0410 S0410 S0411 S0411	87-A91-024-180 87-A90-095-080 87-A91-024-180 87-A90-095-080 87-A91-024-180	SW, TACT SW, TACT SW, TACT	KSHG611BT <hr/> EVQ11G04M <except hr=""> KSHG611BT<hr/> EVQ11G04M<except hr=""> KSHG611BT<hr/></except></except>
C0341 C0351 C0401 C0451 C0452	87-010-194-080 87-010-981-040 87-010-197-080 87-010-196-080 87-010-196-080	C-CAP,S 0.1		S0412 S0412 S0413 S0413 S0414	87-A90-095-080 87-A91-024-180 87-A90-095-080 87-A91-024-180 87-A90-095-080	SW, TACT SW, TACT SW, TACT	EVQ11G04M<56EZ,HS> KSHG611BT+HR> EVQ11G04M <except hr=""> KSHG611BT<hr/> EVQ11G04M<except hr=""></except></except>
C0453 C0454 C0455 C0458 C0459	87-010-196-080 87-010-196-080 87-010-196-080 87-010-320-080 87-010-320-080	C-CAP,S 0.1 C-CAP,S 0.1 C-CAP,S 68E	1-25 Z F C2012 1-25 Z F C2012 1-25 Z F C2012 P-50 J CH GRM <hr/> P-50 J CH GRM <hr/>	S0414 S0415 S0415 S0416 S0416	87-A91-024-180 87-A90-095-080 87-A91-024-180 87-A90-095-080 87-A91-024-180	SW, TACT SW, TACT SW, TACT	KSHG611BT <hr/> EVQ11G04M <except hr=""> KSHG611BT<hr/> EVQ11G04M<except hr=""> KSHG611BT<hr/></except></except>
C0502 C0503 C0504 C0505 C0506	87-010-186-080 87-010-112-040 87-010-405-040 87-010-545-040 87-010-320-080	CAP,E 100-1 CAP,E 10-50 CAP,E 0.22-	00P-50 K B <hs,hr> 16 M 11L SME<hs,hr> 0 M 11L SME<hs,hr> -50 M 11L SME<hs,hr> P-50 J CH GRM<</hs,hr></hs,hr></hs,hr></hs,hr>	S0417 S0417 S0418 S0418 S0419	87-A90-095-080 87-A91-024-180 87-A90-095-080 87-A91-024-180 87-A90-095-080	SW, TACT SW, TACT SW, TACT	EVQ11G04M <except hr=""> KSHG611BT+HR> EVQ11G04M<except hr=""> KSHG611BT+HR> EVQ11G04M<except hr=""></except></except></except>
C0507 C0508 C0510 C0511 C0512	87-010-544-040 87-010-544-040 87-010-322-080 87-010-265-040 87-010-178-080	CAP,E 0.1-5 C-CAP,S 100 CAP,E 33-16	50 M 11L SME <hs,hr> 50 M 11L SME<hs,hr> 0P-50 J CH GRM<hs,hr> 6 M 11L SME<hs,hr> 00P-50 K B <hs,hr></hs,hr></hs,hr></hs,hr></hs,hr></hs,hr>	S0419 S0420 S0420 S0421 S0425	87-A91-024-180 87-A90-095-080 87-A91-024-180 87-A90-095-080 87-A90-095-080	SW, TACT SW, TACT SW, TACT	KSHG611BT <hr/> EVQ11G04M<56EZ,HS> KSHG611BT <hr/> EVQ11G04M<56EZ> EVQ11G04M <except hr=""></except>
C0513 C0515 C0520 C0602 C0603	87-010-196-080 87-010-178-080 87-010-178-080 87-010-322-080 87-010-322-080	C-CAP,S 100 C-CAP,S 100 C-CAP,S 100	1-25 Z F C2012 <hs,hr> DOP-50 K B <hs,hr> DOP-50 K B C2012<hr/> DP-50 J CH GRM DP-50 J CH GRM</hs,hr></hs,hr>	S0425 S0426 S0426 S0432 S0432	87-A91-024-180 87-A90-095-080 87-A91-024-180 87-A90-095-080 87-A91-024-180	SW, TACT SW, TACT SW, TACT	KSHG611BT <hr/> EVQ11G04M <except hr=""> KSHG611BT<hr/> EVQ11G04M<except hr=""> KSHG611BT<hr/></except></except>
C0604 C0650 C0699 CN0101 CN0102	87-010-322-080 87-010-196-080 87-010-196-080 87-099-720-010 87-099-015-010	C-CAP,S 0.1 C-CAP,S 0.1	OP-50 J CH GRM 1-25 Z F C2012 1-25 Z F C2012 LK TYK-B(P) BLK 6216	S0433 S0433 S0434 S0434 S0435	87-A90-095-080 87-A91-024-180 87-A90-095-080 87-A91-024-180 87-A90-095-080	SW, TACT SW, TACT SW, TACT	EVQ11G04M <except hr=""> KSHG611BT+HR> EVQ11G04M<except hr=""> KSHG611BT+HR> EVQ11G04M<except hr=""></except></except></except>
CN0301 CN0302 FB0301 FB0501 FFC0102	87-A60-140-010 87-A60-136-010 87-008-372-080 87-008-372-080 88-913-301-110	,	FE <k,54ez,56ez> L01 RN1 L01 RN1<hs,hr></hs,hr></k,54ez,56ez>	S0435 S0436 S0436 S0437 S0437	87-A91-024-180 87-A90-095-080 87-A91-024-180 87-A90-095-080 87-A91-024-180	SW, TACT SW, TACT SW, TACT	KSHG611BT <hr/> EVQ11G04M <except hr=""> KSHG611BT<hr/> EVQ11G04M<except hr=""> KSHG611BT<hr/></except></except>
	88-911-101-110 88-915-101-110 8A-NF8-601-010 87-A61-242-010 87-A50-408-010	FF-CABLE, 1 FL,HNA-11MN	LK MONO W/SW <hs,hr></hs,hr>	SW0252 SW0253 VR0501	87-A91-555-010 87-A91-542-010 86-NFA-607-010	SW, RTRY	EC12E24504 EC12E12504 10K15AX1 1 V <hs,hr></hs,hr>
LED0601 LED0602 LED0603	87-A40-589-040 87-A40-803-010 87-A40-619-080 87-A40-619-080 87-A40-619-080	LED, SLR-56E LED, SLR-56E	VCT31 RED 10CXM-S LF38 BLUE PT-TE7-W GRN PT-TE7-W GRN PT-TE7-W GRN	CON105 CON105 SFR1 SOL1	87-099-753-010 87-099-756-010 87-024-581-010 82-ZM1-618-410	CONN, 15	P 9604 S F <k,54ez,56ez> P 9604 S F<hs,hr> K DIA 6H Y,27</hs,hr></k,54ez,56ez>

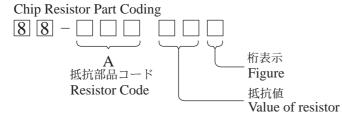
REF. NO	PART NO.	KANRI	DESCRIPTION	REF. NO	PART NO.	KANF	RI DESCRIPTION
		NO.				NO.	
SOL2	82-ZM1-618-410	SOL ASSY	,27	PT C.B			
SW1	87-A90-248-010	SW, MICRO	ESE11SH2CXQ				
SW2	87-A90-248-010	SW, MICRO	ESE11SH2CXQ	C0001	87-010-387-0	80	CAP,E 470-25 M SME
SW3	87-A90-248-010	SW, MICRO	ESE11SH2CXQ	C0002	87-A11-148-0	80	CAP, TC U 0.1-50 Z F <k, 54ez,="" 56ez=""></k,>
SW4	87-036-110-010	SW, MICRO	SPPB62	C0031	87-010-403-0	40	CAP, E 3.3-50 M 11L SME
				/\CN0001	87-A61-122-0	10	CONN, 11P V TID-A
SW5	87-036-110-010	SW, MICRO	SPPB62	₹PT0001	8A-NF8-605-0	10	PT, ANF-8 LH <hs, hr=""></hs,>
SW6	87-036-110-010	SW, MICRO	SPPB62 <hs,hr></hs,hr>				
SW8	87-A90-248-010	SW,MICRO	ESE11SH2CXQ <hs,hr></hs,hr>	/NPT0001	8A-NF8-608-0	10	PT, ANF-8 EZ <k, 54ez,="" 56ez=""></k,>
SW9	87-A90-248-010	SW, MICRO	ESE11SH2CXQ <hs,hr></hs,hr>	♠PT0002	8A-NF8-662-0	10	PT, SUB ANF-8 (E) <k, 54ez,="" 56ez=""></k,>
W1	82-ZM3-601-010	RBN, CORD	,4P-75	№ PT0002	8A-NF8-673-0	10	PT, SUB ANF-8 (H) KAMI <hs, hr=""></hs,>
				/RY0001	87-A91-339-0	10	RELAY, AC DC12V G5PA-2 <hs, hr=""></hs,>
				 	87-A91-418-0	10	RELAY, AC12V G5PA-1-M <k, 54ez,="" 56ez=""></k,>
HEAD-1 C.	В						
				/\S0001	87-A90-165-0	10	SW, SL 1-2-3 SWS2301 <hs, hr=""></hs,>
	85-ZM3-602-010) PWB,FLEX	A	T0001	87-A60-317-0	10	TERMINAL, 1P MSC
CON301	87-NF6-615-010	CONN ASS	Y,3P PB	 ₹T0002	87-A60-317-0	10	TERMINAL, 1P MSC

HEAD-2 C.B<HS,HR>

85-ZM3-602-010 CON351 87-NF6-616-010 PWB,FLEX A<HS,HR>
CONN ASSY,8P-RPB<HS,HR>

〇チップ抵抗部品コード/CHIP RESISTOR PART CODE

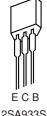
チップ抵抗部品コードの成り立ち



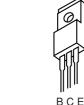
チップ抵抗 Chip resistor

Cimp resistor								
容量	種類	許容誤差	記号	寸法/Dime	ensions ((mm)		抵抗コード : A
Wattage	Type	Tolerance	Symbol	外形/Form	L	W	t	Resistor Code : A
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ	L J t	1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ	r	3.2	1.6	0.55	128

TRANSISTOR LLUSTRATION



2SA933S DTC114ES KTC3199



B C E 2SB1370



2SJ460 2SK2541



2SC3331 CD1585 CSA952



CSC4115



KTA1266 KTC3198



2SA1235 2SC2714 2SC3052 CMBT5401 CMBT5551 CSD1306 KRA102S KRA107S KRC102S

RT1N441C RT1P141C RT1P144C

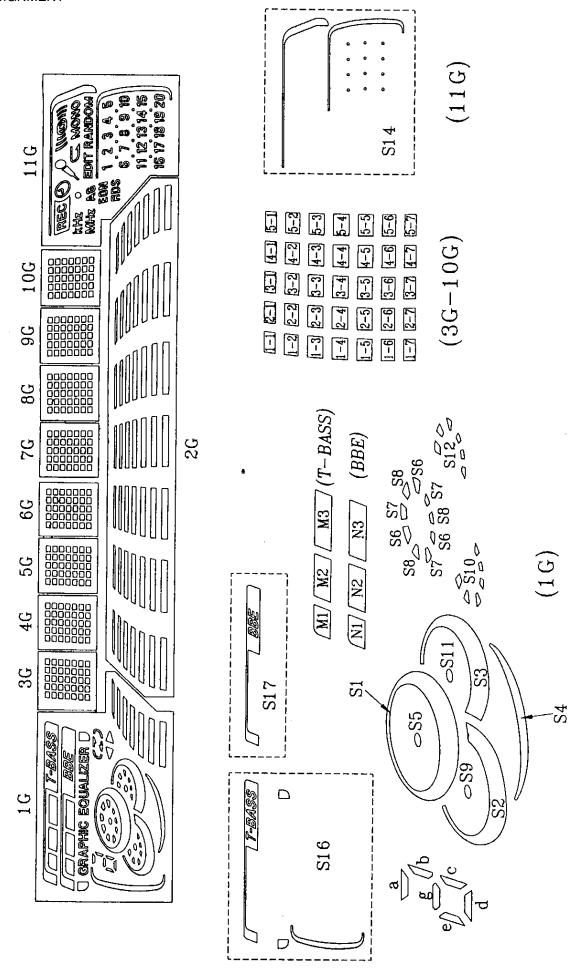


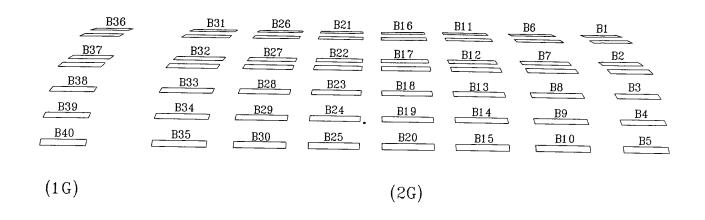
2SJ461 2SK2158



2SK360

GRID ASSIGNMENT

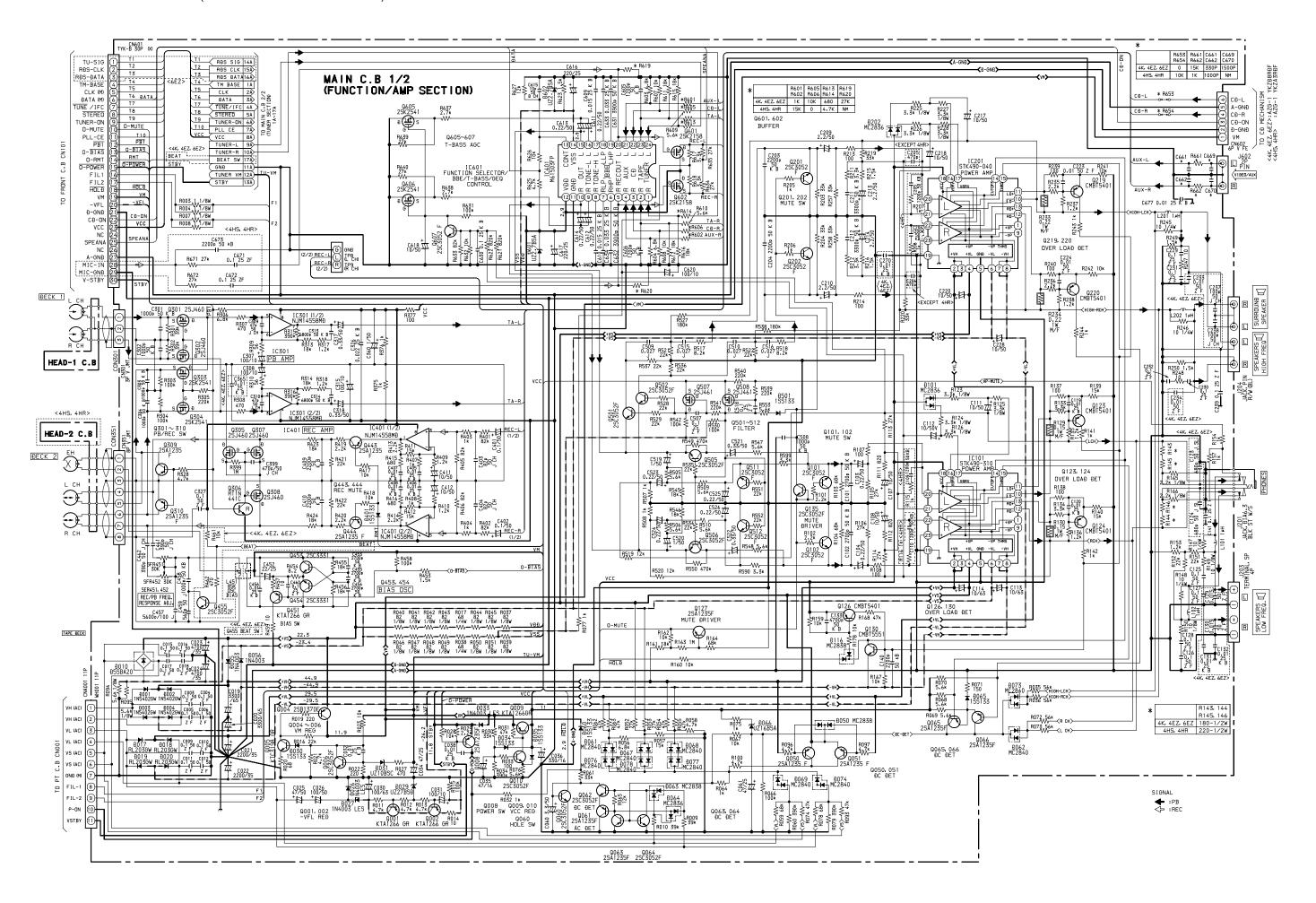


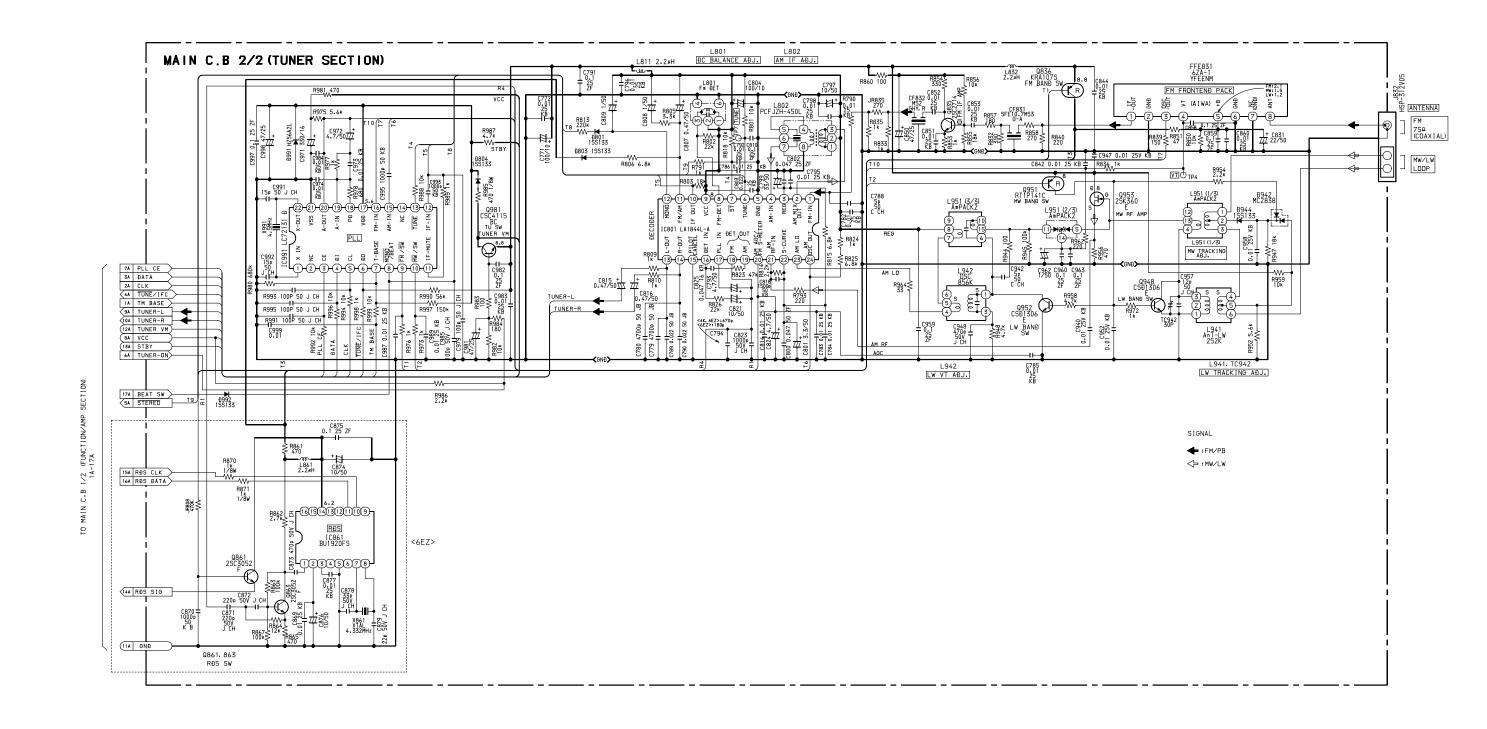


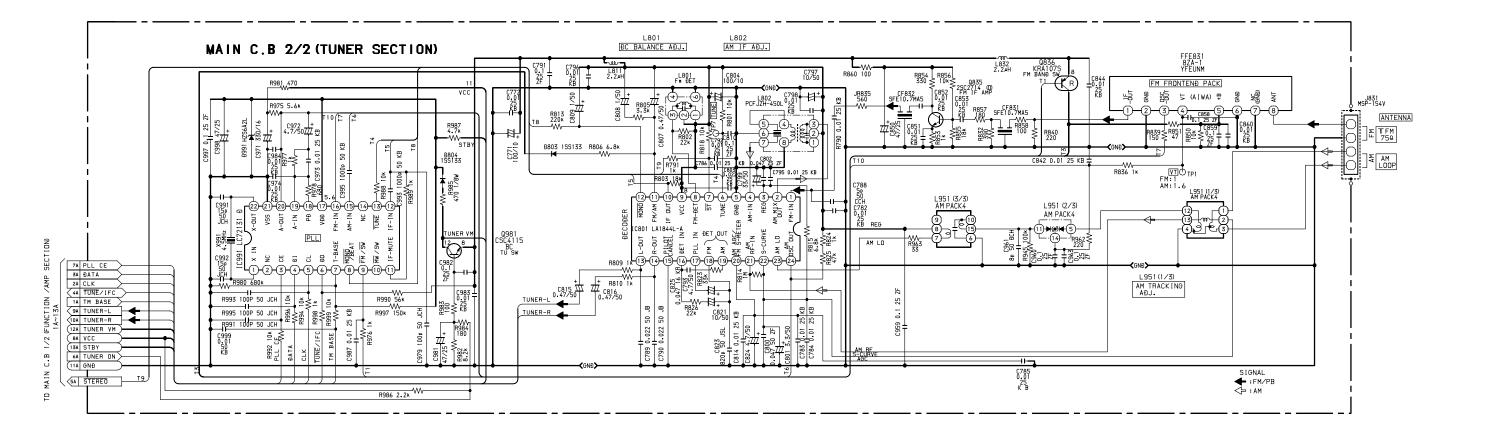
ANODE CONNECTION

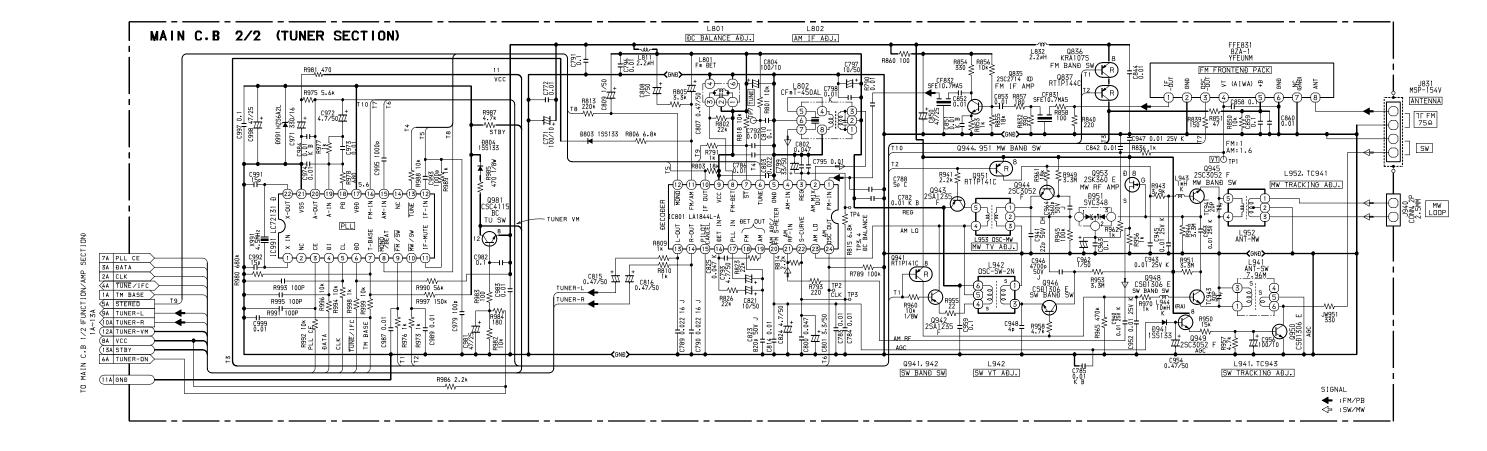
1 G	2G	3G-10G	11G
S17	B35	1-1	G
N1	B30	2-1	MOMO
N2	B25	3-1	RANDOM
N3	B20	4-1	Maconn
GRAPHIC EQUALIZER	B1 5	5-1	EDIT
C	B1 0	1-2	0
5	B5	2-2	(REC
2	B34	3-2	kHz
abla	B29	4-2	MHz
0	B24	5-2	0
S4	B1 9	1-3	AG
S2	B1 4	2-3	ROZ
S10	В9	3-3	RDS
S9	B4	4-3	S14
S3	B33	5-3	20
S12	B28	1-4	19
S11	B23	2-4	18
S1	B1 8	3-4	17
	S17 N1 N2 N3 CRAPHIC EQUALIZER S10 S9 S3 S12 S11	S17 B35 N1 B30 N2 B25 N3 B20 CRAPHIC EQUALIZER B15 B10 B5 B34 B29 B24 B29 B24 B19 S2 B14 S10 B9 S9 B4 S3 B33 S12 B28 S11 B23	S17 B35 1-1 N1 B30 2-1 N2 B25 3-1 N3 B20 4-1 CRAPHIC EQUALIZER B15 5-1 B10 1-2 B5 2-2 D B34 3-2 B29 4-2 D B24 5-2 S4 B19 1-3 S2 B14 2-3 S10 B9 3-3 S9 B4 4-3 S3 B33 5-3 S12 B28 1-4 S11 B23 2-4

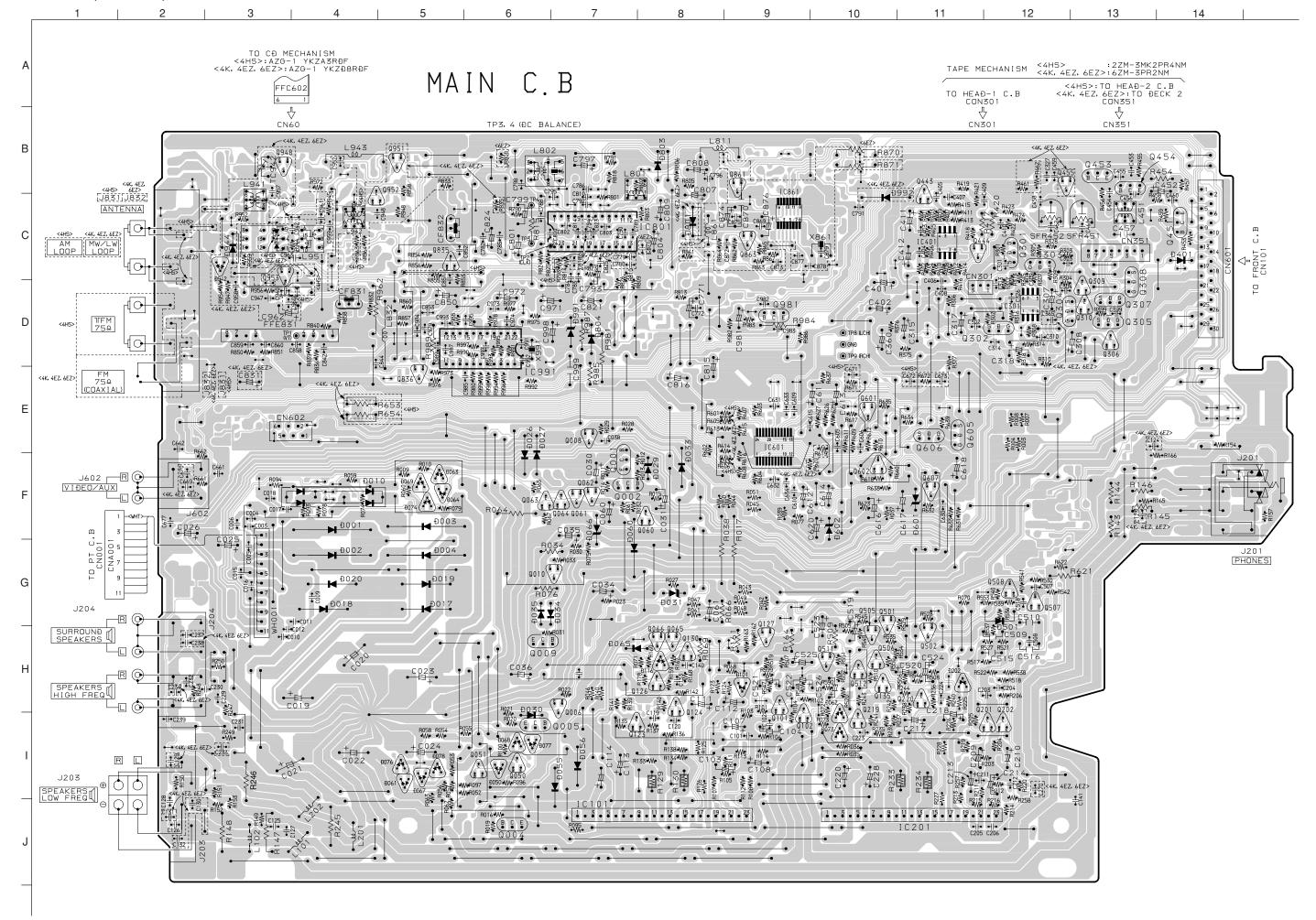
_				
	1 G	2G	3G-10G	11 G
P19	S6	B13	4-4	16
P20	S7	B8	5-4	15
P21	S8	В3	1-5	14
P22	S5_	B32	2-5	13
P23	S16	B27	3-5	12
P24_	M1	B22	4-5	11
P25	M2	B17	5-5	10
P26	М3	B12	1-6	9
P27_	е	B7	2-6	8
P28	a,g,d	B2	3-6	7
P29	Ъ	B31	4-6	6
P30	С	B26	5-6	5
P31	B40	B21	1-7	<u></u>
P32	B39	B16	2-7	3
P33_	B38	B1 1	3-7	2
P34	B37	В6	4-7	1
P35	B36	B1	5-7	D

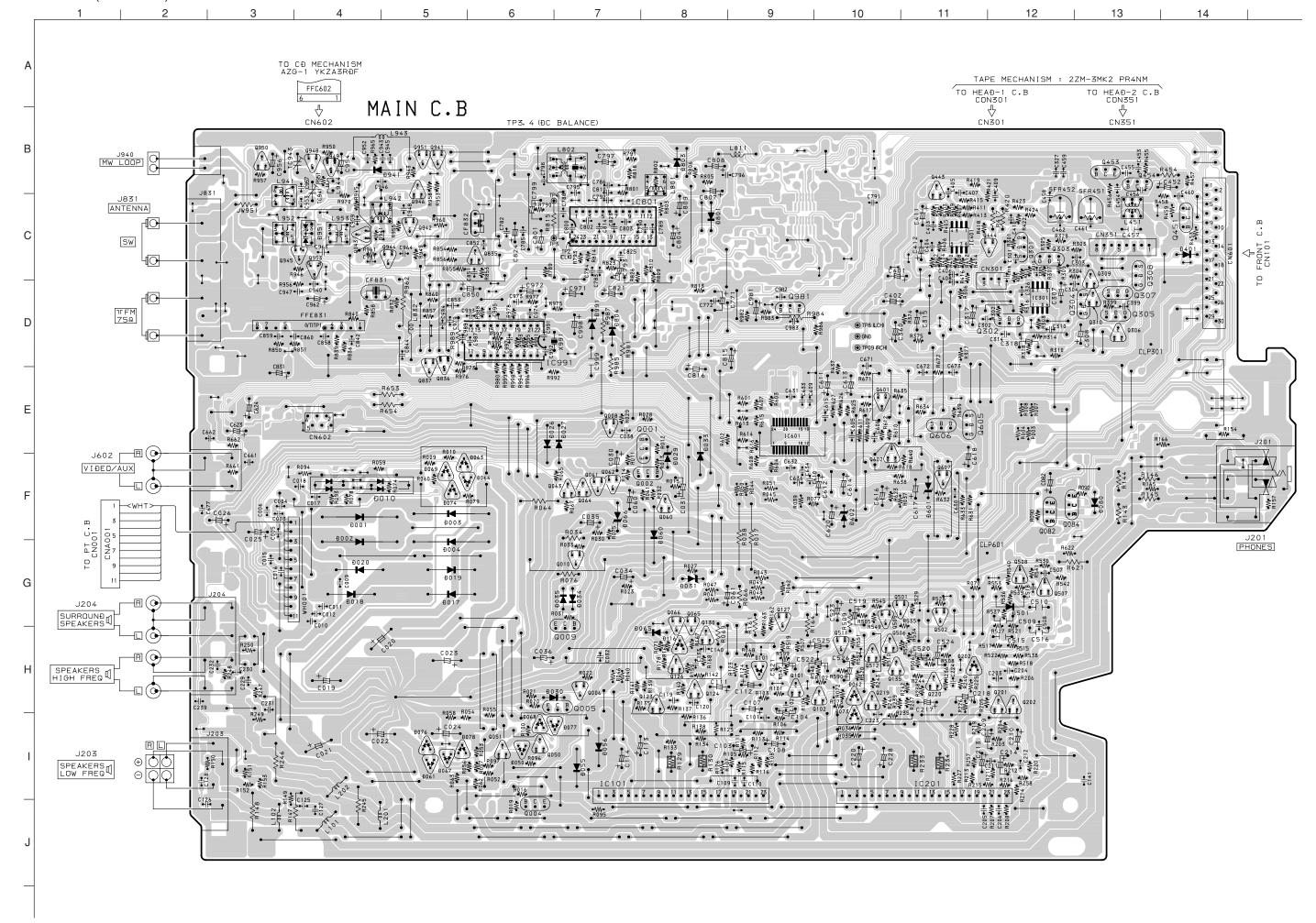


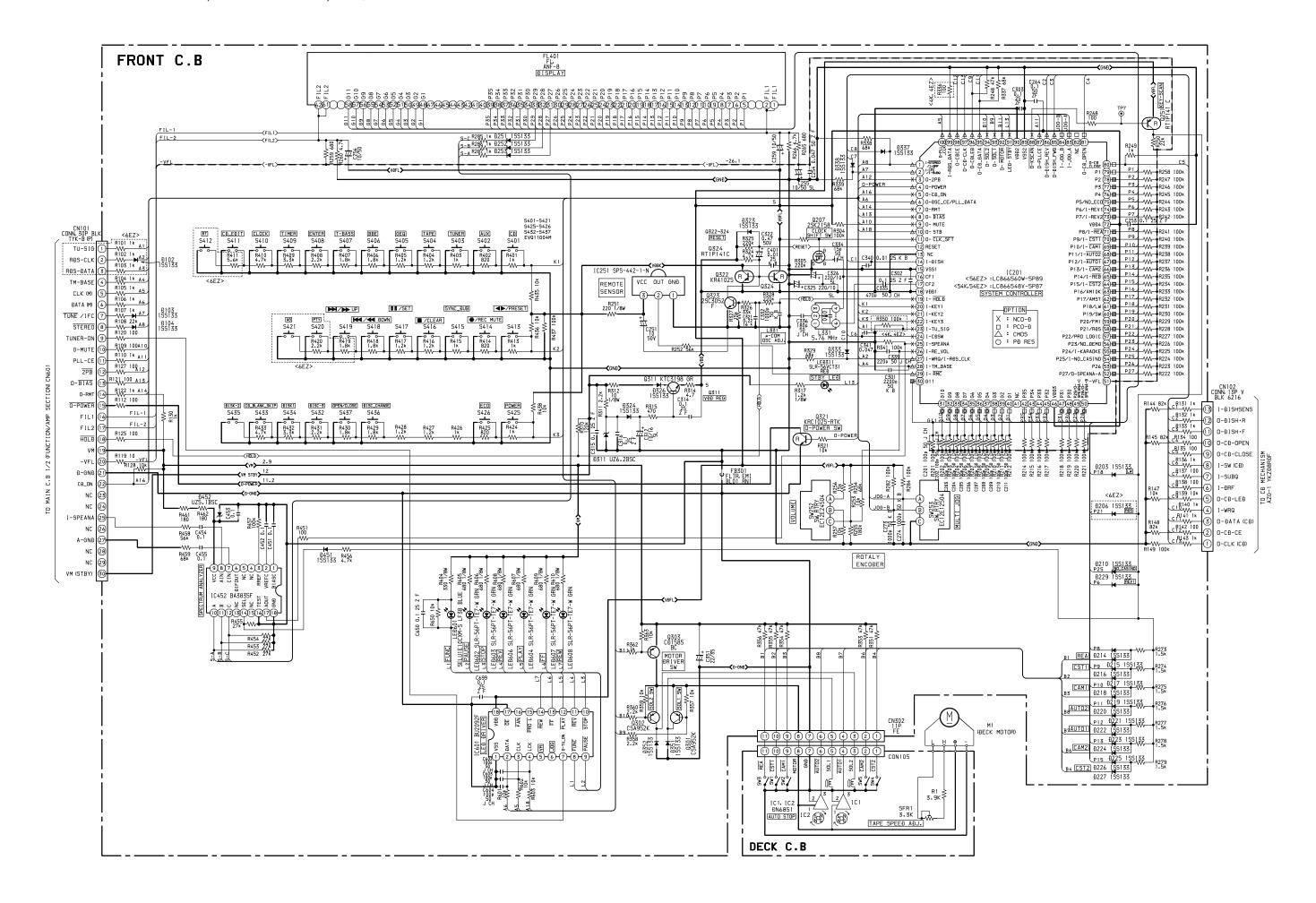


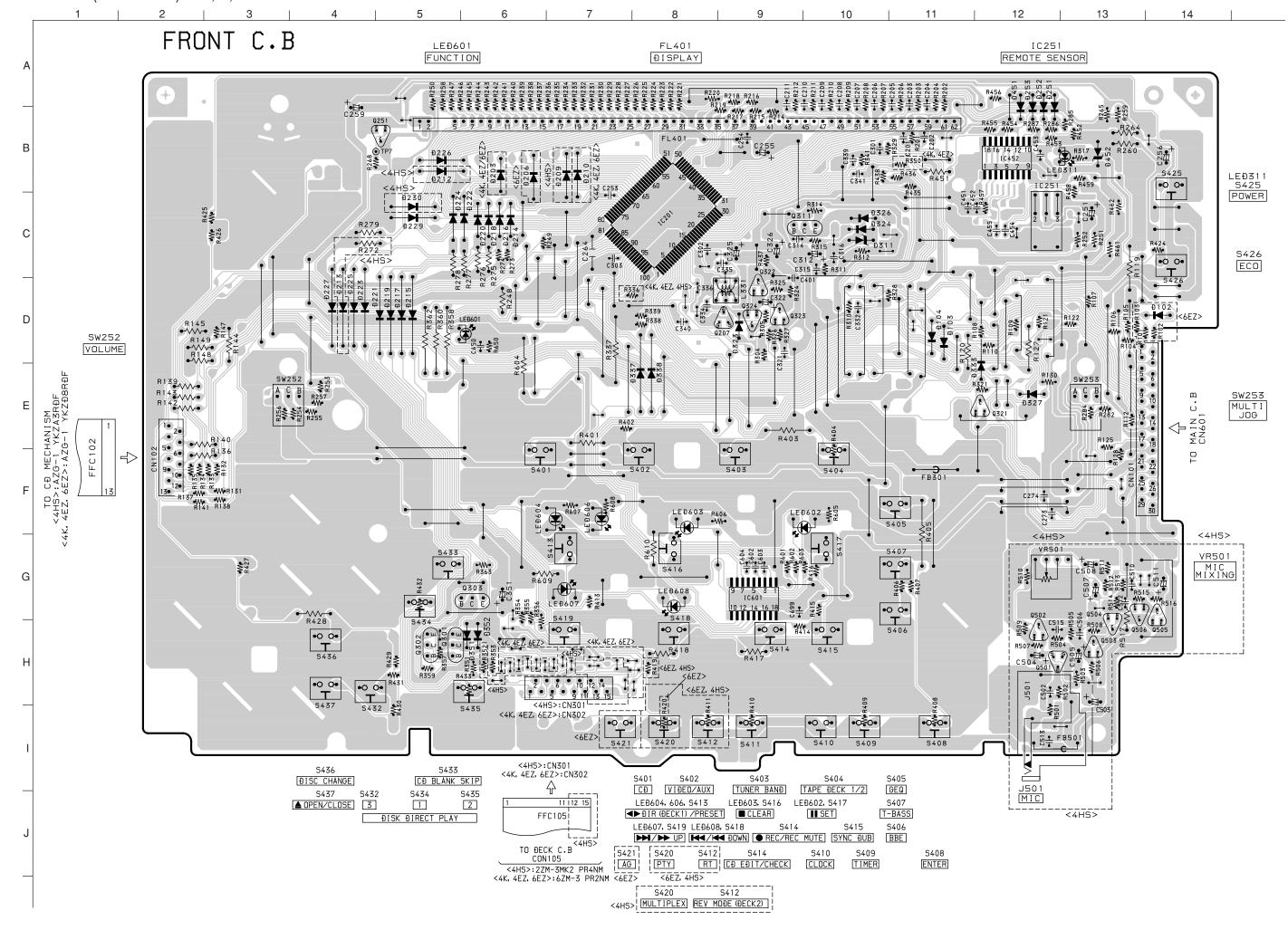


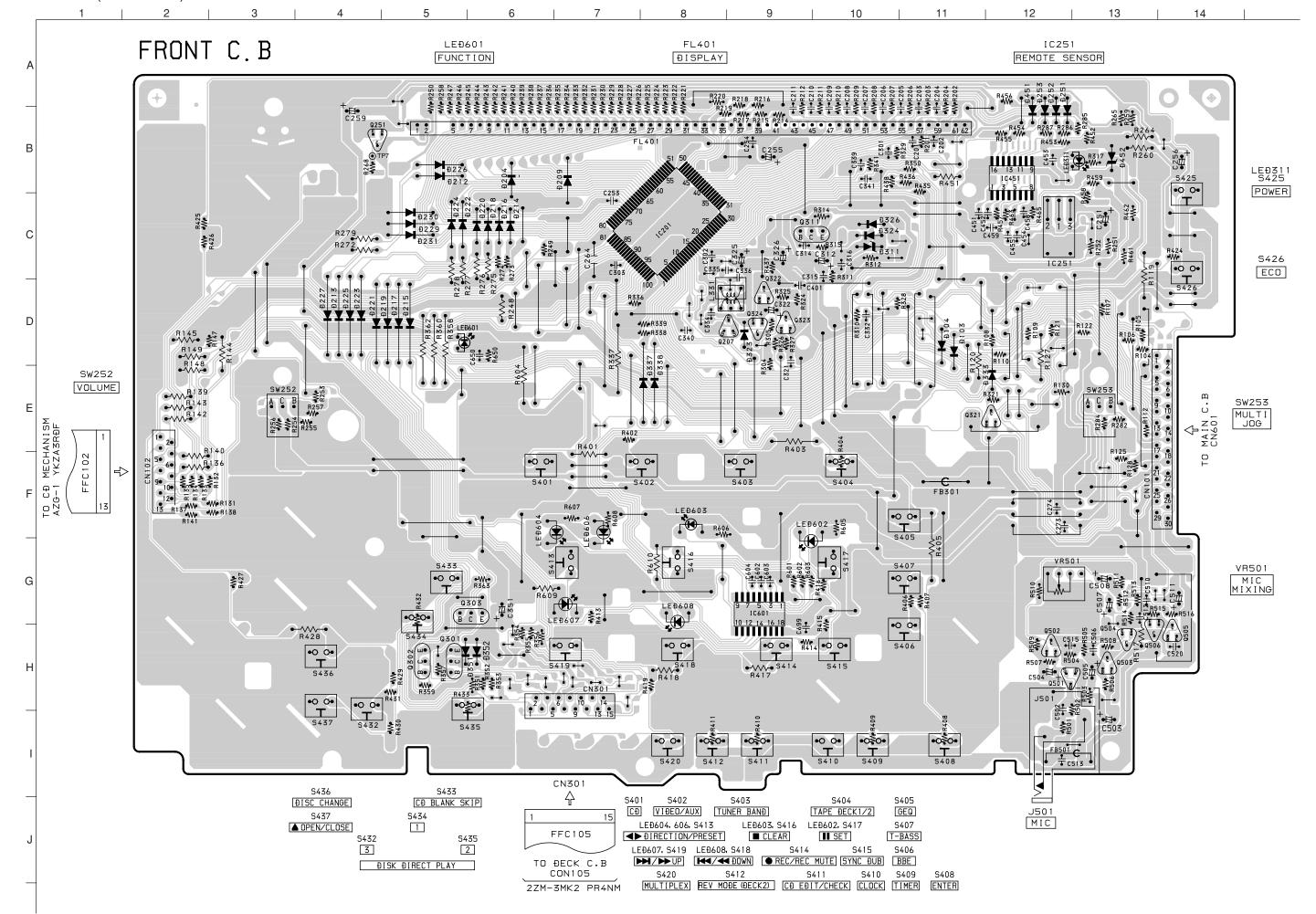


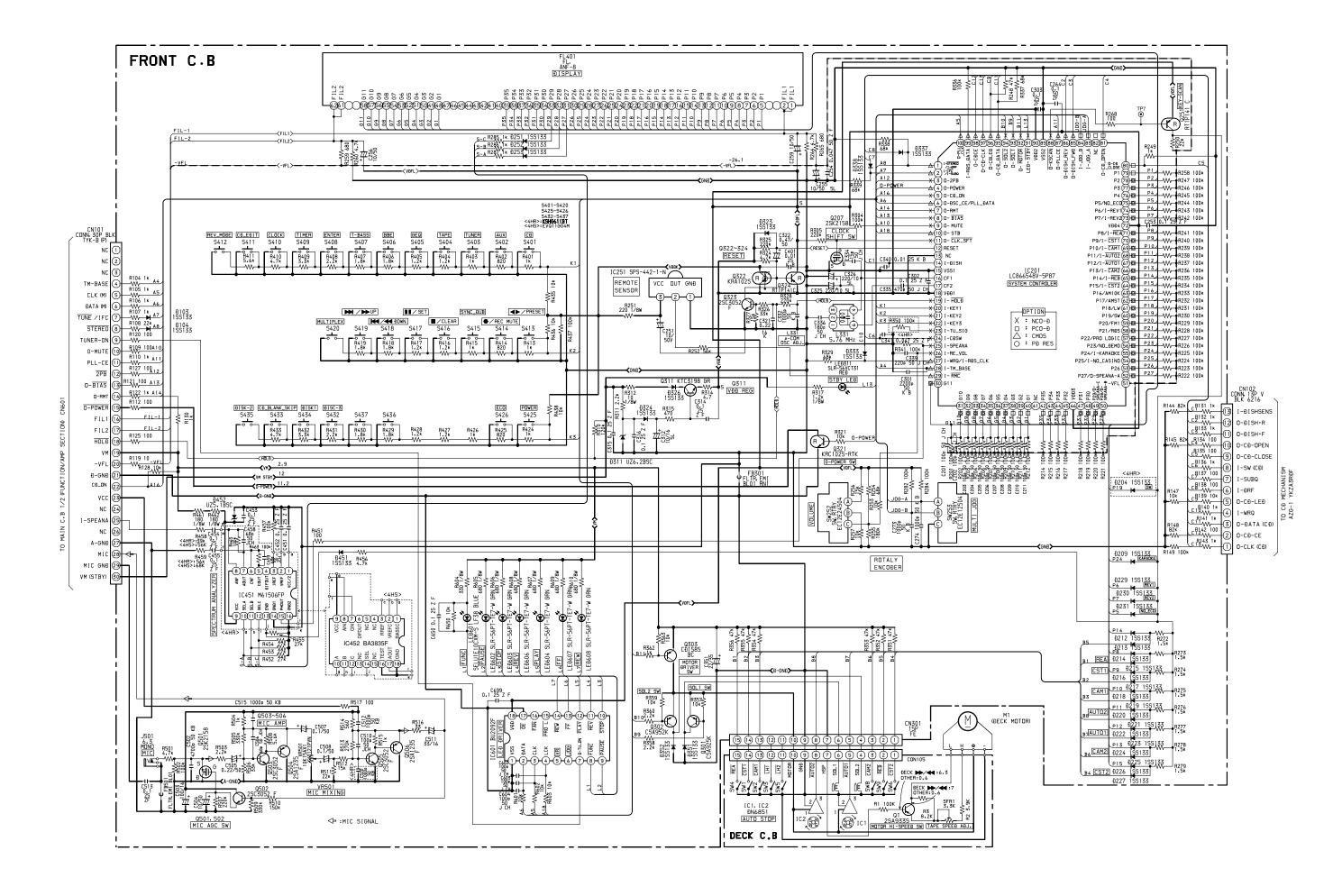


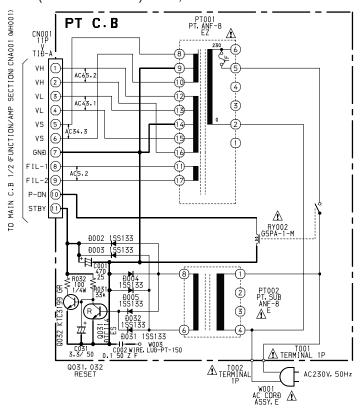




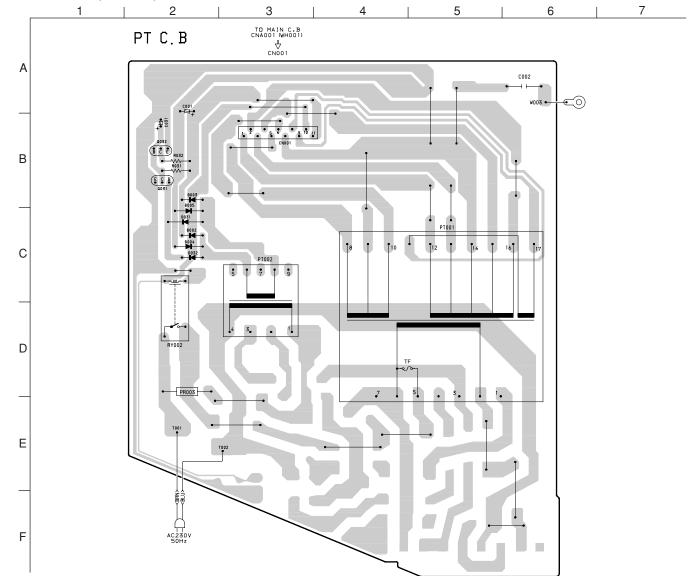




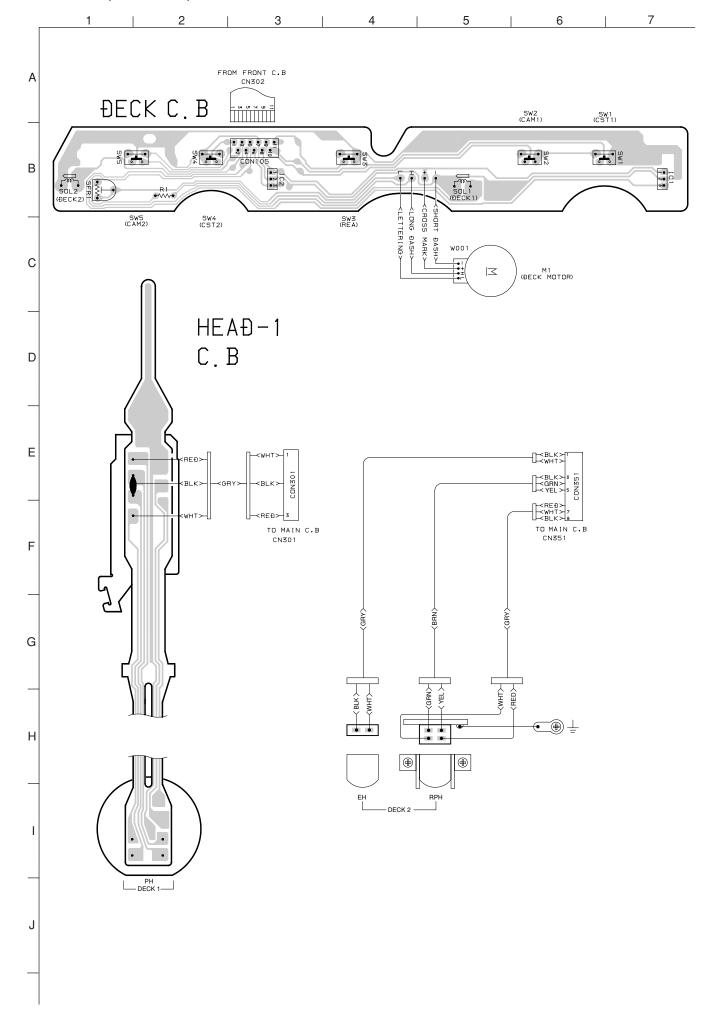


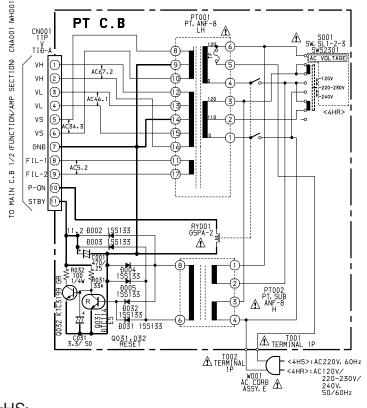


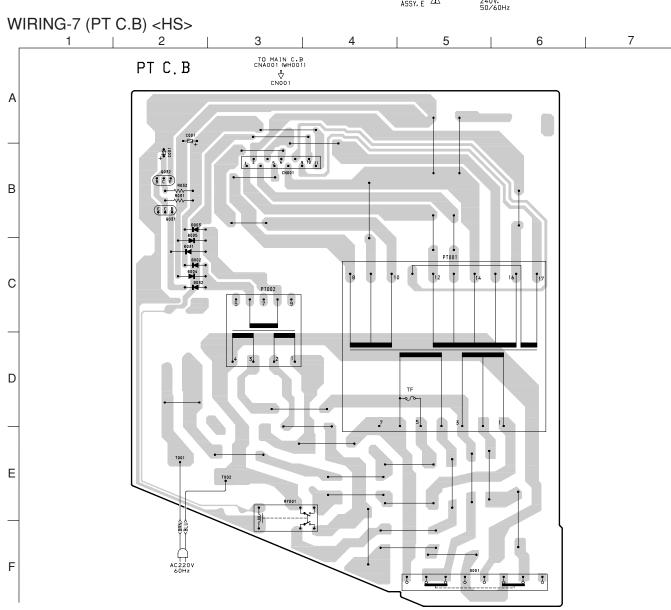
WIRING-5 (PT C.B) <EZ,K>

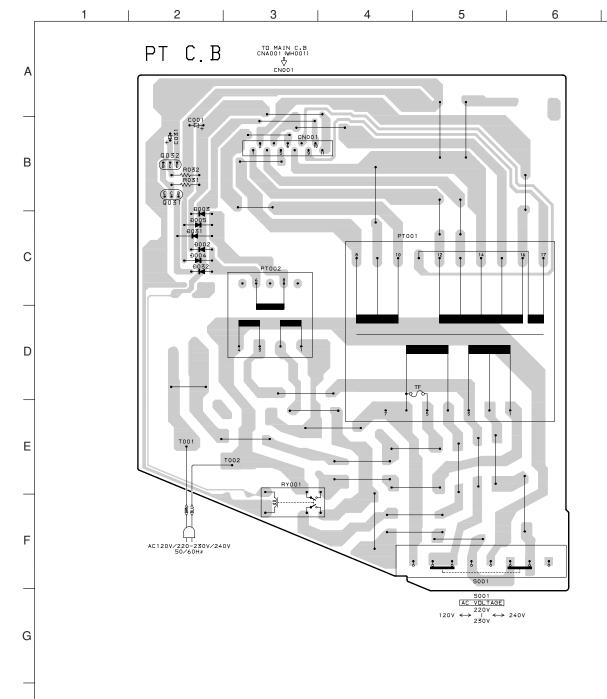


WIRING-6 (DECK C.B) <EZ,K>



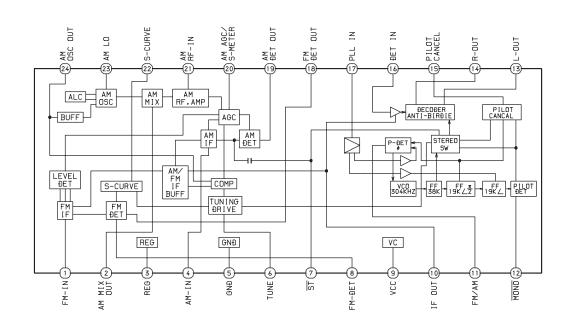




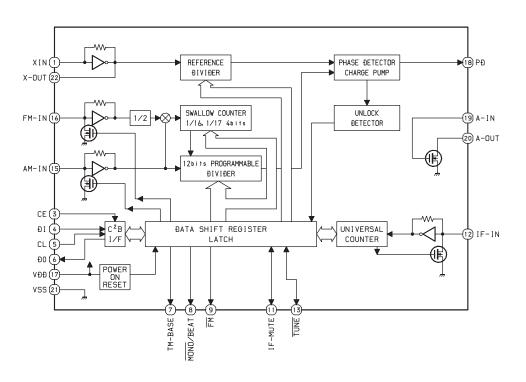


IC BLOCK DIAGRAM

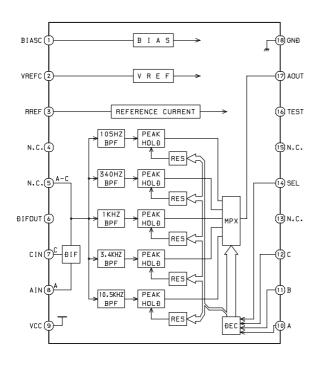
IC, LA1844

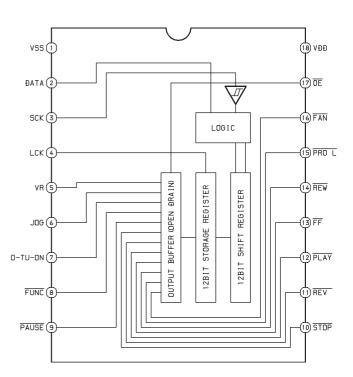


IC, LC72131D



IC, BA3835F IC, BU2092F

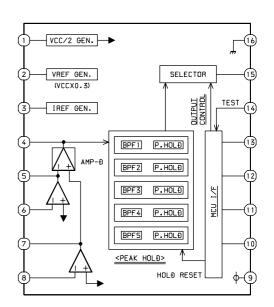




IC, M61503FP

TUNER-R (1 (24)TUNER-L MONO SW TAPE-R (2 (23) TAPE-L (22) CÐ-L CĐ-R(3 MUTE AUX-R (4 (21) AUX-L VOL ۷OL RECOUT-R (5 (20) RECOUT-L TREBLE TREBLE BBE-RHP 6 (19) BBE-LHP BBE BBE-RLP 18) BBE-LLP TONE-H-R (8 (17) TONE-H-L ATT ATT 6 TONE-L-L TONE-L-R (9 BUS BUS OUT-R (10) (15) OUT-L GNÐ (11) (14) VSS CONTROL VĐĐ (12) (13) CONT

IC, M61506FP

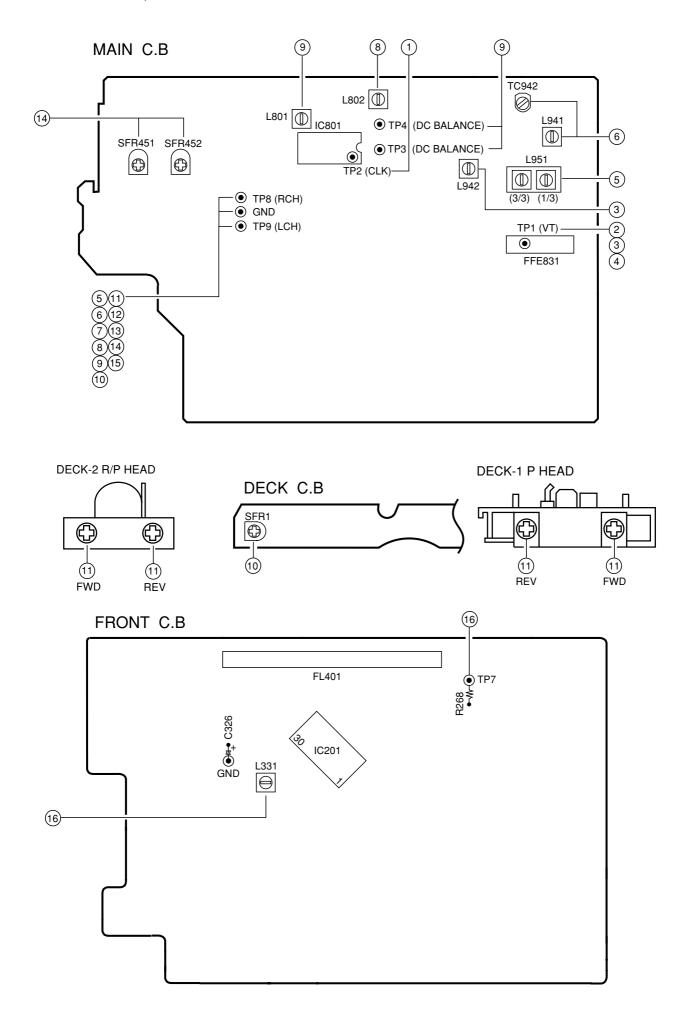


IC DESCRIPTION

IC, LC866560W-5P89 <56EZ>, LC866548V-5P87 <Except 56EZ>

,		•	•
Pin No.	Pin Name	I/O	Description
1	I-STEREO/I-DRF	I	Stereo detected input/CD DRF input
2	I-ĪFC/I-SUBQ	I	Tune IF count serial data input/CD SUBQ input
3	O-2PB	О	Deck 2 playback switch output
4	O-POWER	О	System power supply ON/OFF output
5	O-CD-ON	О	CD power ON/ OFF output
6	O-PLL_DATA	О	LED driver, Tuner IC, Function IC data output
7	O-RMT	О	Deck 2 REC MUTE output
8	O-BIAS	О	Deck 2 bias ON/OFF output
9	O-MUTE	О	System mute ON/OFF output
10	O-STB	О	Latch strobe output for LED driver IC
11	O-CLK_SFT	О	Micon clock shift output
12	RESET	I	System reset
13	NC	_	Not connected
14	I-DISH	I	CD turntable photo sensor A/D converter input
15	VSS1	_	GND
16	CF1	_	5.76 MHz oscillator circuit
17	CF2	_	5.76 MHz oscillator circuit
18	VDD1	_	Power supply input
19	I-HOLD	I	Power failure detected input
20	I-KEY1	I	KEY input (A/D)
21	I-KEY2	I	KEY input (A/D)
22	I-KEY3	I	KEY input (A/D)
23	I-TU_SIG	I	Tuner signal input
24	I-CDSW	I	CD mechanical switch A/D converter input
25	I-SPEANA	I	A/D input for spectrum analyzer display
26	I-RE_VOL	I	Rotary encoder input (VOL)
27	I-WRQ/I-RDS_CLK	I	CD WRQ input/Tuner RDS clock input
28	I-TM_BASE	I	Reference clock input for timer watch
29	I-RMC	I	System remotecontrol signal input
30 ~ 40	G11 ~ G1	О	FL GRID output G11 ~ G1
41	NC	_	Not connected
42 ~ 45	P35 ~ P32	О	FL SEGMENT output P35 ~ P32
46	VDD3	_	Power supply input
47 ~ 48	P31 ~ P30	О	FL SEGMENT output P31 ~ P30
49	P29/O-SPEANA-C	О	FL SEGMENT output P29/Spectrum analyzer band switching output
50	P28/O-SPEANA-B	О	FL SEGMENT output P28/Spectrum analyzer band switching output
51	VFL	_	Power supply input for FL display
52	P27/O-SPEANA-A	О	FL SEGMENT output P27/Spectrum analyzer band switch output
53	P26	О	FL SEGMENT output P26
54	P25/I-NO_CASINO	I/O	FL SEGMENT output P25/NO CASINO DEMO input to diode
55	P24/I-KARAOKE	I/O	FL SEGMENT output P24/KARAOKE input to diode
56	P23/NO_DEMO	I/O	FL SEGMENT output P23/NO DEMO input to diode
	1		

Pin No.	Pin Name	I/O	Description
57	P22/PRO LOGIC	I/O	FL SEGMENT output P22/PROLOGIC input to diode (not used)
58	P21/RDS	I/O	FL SEGMENT output P21/RDS input to diode
59	P20/FM1	I/O	FL SEGMENT output P20/FM1 input to diode
60	P19/SW	I/O	FL SEGMENT output P19/SW input to diode
61	P18/LW	I/O	FL SEGMENT output P18/LW input to diode
62	P17/AMST	I/O	FL SEGMENT output P17/AMST input to diode
63	P16/AM10K	I/O	FL SEGMENT output P16/AM10K input to diode
64	P15/I-CST2	I/O	FL SEGMENT output P15/DECK2 cassette detect switch data input
65	P14/I-REB	I/O	FL SEGMENT output P14/DECK2 side-B record OK switch data input
66	P13/I-CAM2	I/O	FL SEGMENT output P13/DECK2 CAM switch signal input
67	P12/I-AUTO1	I/O	FL SEGMENT output P12/DECK1 AUTO STOP signal input
68	P11/I-AUTO2	I/O	FL SEGMENT output P11/DECK2 AUTO STOP signal input
69	P10/I-CAM1	I/O	FL SEGMENT output P10/DECK1 CAM switch data input
70	P9/I-CST1	I/O	FL SEGMENT output P9/DECK1 cassette detect switch data input
71	P8/I-REA	I/O	FL SEGMENT output P8/DECK2 side A record OK switch data input
72	VDD4	_	Power supply input
73	P7/I-REV2	I/O	FL SEGMENT output P7/DECK2 REVERSE mode input to diode
74	P6/I-REV1	I/O	FL SEGMENT output P6/DECK1 REVERSE mode input to diode
75	P5/NO_ECO	I/O	FL SEGMENT output P5/NO ECO MODE input to diode
76 ~ 79	P4 ~ P1	О	FL SEGMENT output P4 ~ P1
80	O-CD CLOSE	О	CD TRAY CLOSE data output
81	O-CD OPEN	0	CD TRAY OPEN data output
82	NC	_	Not connected
83	I-JOG_A	I	Rotary encoder A input (JOG)
84	I-JOG_B	I	Rotary encoder B input (JOG)
85	O-DISH_FWD	0	CD turntable forward rotation output
86	O-DISH_REV	0	CD turntble reverse rotation output
87	O-PLL_CE	0	PLL IC chip enable output
88	O-KSCAN	0	Switch SCAN timing output
89	VSS2	_	GND
90	VDD2	_	Power supply input
91	LED-STBY	О	STAND BY LED (Echo mode) ouput
92	O-MOTOR	О	DECK MOTOR ON/OFF output
93	O-SOL1	О	DECK1 soleroid ouput
94	O-SOL2	О	DECK2 soleroid ouput
95	O-CD-DATA	О	CD DATA output
96	O-CD-LED	О	CD LED output
97	O-CD CLK	О	CD clock output
98	O-CD CE	О	CD chip enable output
99	I-RDS_DATA	I	RDS data input
100	O-PLL_CLK	О	PLL IC CLOCK output



< TUNER SECTION >

1. Clock frequency Check

Settings: • Test point: TP2

Method : Set to AM 1602kHz and check that the test point is $2052kHz\pm45Hz$.

2. MW VT Check

Settings: • Test point: TP1 (VT)

Method: Set to MW 1602kHz, 531kHz and check that the test point is less than 8.0V (1602kHz) and more than 0.6V (531kHz).

3. LW VT Adjustment

Settings: • Test point: TP1 (VT)

• Adjustment location: L942

Method: Set to LW 144kHz and adjust L942 so that the test point is $1.3V \pm 0.05V$.

Then set to LW 290kHz and check that the test point is less than 8.0V.

4. FM VT Check

Settings: • Test point: TP1 (VT)

Method: Set to FM 87.5MHz, 108.0MHz and check that the test point is more than 0.5V (87.5MHz) and less than 8.0V (108.0MHz).

5. MW Tracking Adjustment

Settings: • Test point: TP8(Lch), TP9(Rch)

• Adjustment location :

L951(1/3) 999kHz

Method : Set to MW 999kHz and adjust L951(1/3) so that the level at the test point becomes maximum.

6. LW Tracking Adjustment

Settings: • Test point: TP8(Lch), TP9(Rch)

• Adjustment location: L941, TC942

Method: Set up TC942 to center position.

Set to LW 144kHz and adjust L941 so that the level at test point becomes maximum.

Then set to LW 290kHz and adjust TC942 so that the level at test point becomes maximum.

7. FM Tracking Check

Settings: • Test point: TP8(Lch), TP9(Rch)

Method : Set to FM 98.0MHz and check that the test point is less than $13 dB \mu V$.

8. AM IF Adjustment

Settings: • Test point: TP8(Lch), TP9(Rch)

• Adjustment location :

L802 999kHz

9. DC Balance / Mono Distortion Adjustment

Settings: • Test point: TP3, TP4 (DC Balance)

 $: TP8(Lch), TP9(Rch) \ (Distortion) \\$

• Adjustment location: L801

• Input level : $60dB\mu V$

Method : Set to FM 98.0MHz and adjust L801 so that the voltage between TP3 and TP4 becomes $0V \pm 0.3V$. Next, check that the distortion is less than 1.3%.

< DECK SECTION >

10. Tape Speed Adjustment (DECK 2)

Settings: • Test tape: TTA-100

• Test point : TP8(Lch), TP9(Rch)

• Adjustment location : SFR1

Method : Play back the test tape and adjust SFR1 so that the frequency counter reads $3000\text{Hz} \pm 5\text{Hz}$ and $\pm 45\text{Hz}$ (REV) with respect to forward speed.

11. Head Azimuth Adjustment (DECK 1, DECK 2)

Settings: • Test tape: TTA-330

• Test point : TP8(Lch), TP9(Rch)

• Adjustment location : Head azimuth

adjustment screw

Method: Play back (FWD) the 8kHz signal of the test tape and adjust screw so that the output becomes maximum. Next, perform on REV PLAY mode.

12. PB Frequency Response Check (DECK 1, DECK 2)

Settings: • Test tape: TTA-300

• Test point :TP8(Lch), TP9(Rch)

Method: Play back the 315Hz and 8kHz signals of the test tape and check that the output ratio of the 8kHz signal with respect to that of the 315Hz signal is within 5dB.

13. PB Sensitivity Check (DECK 1, DECK 2)

Settings: • Test tape: TTA-200

• Test point : TP8(Lch), TP9(Rch)

Method : Play back the test tape and check that the output level of the test point is $140 \text{mV} \pm 3 \text{dB}$.

14. REC/PB Frequency Response Adjustment (DECK 2)

Settings: • Test tape: TTA-602

• Test point : TP8(Lch), TP9(Rch)

• Input signal: 1kHz / 8kHz (LINE IN)

• Adjustment location : SFR451 (Lch)

SFR452 (Rch)

Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP8, TP9 becomes -20VU. Record and play back the 1kHz and 8kHz signals and adjust SFRs so that the output of the 8kHz signals becomes 0dB $\pm\,0.5\text{dB}$ with respect to that of the 1kHz signal.

15. REC/PB Sensitivity Check (DECK 2)

Settings: • Test tape: TTA-602

• Test point : TP8(Lch), TP9(Rch)

• Input signal : 1kHz (LINE IN)

Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at TP8, TP9 becomes 0VU. Record and play back the 1kHz signals and check that the output is $-2dB \pm 3.0dB$.

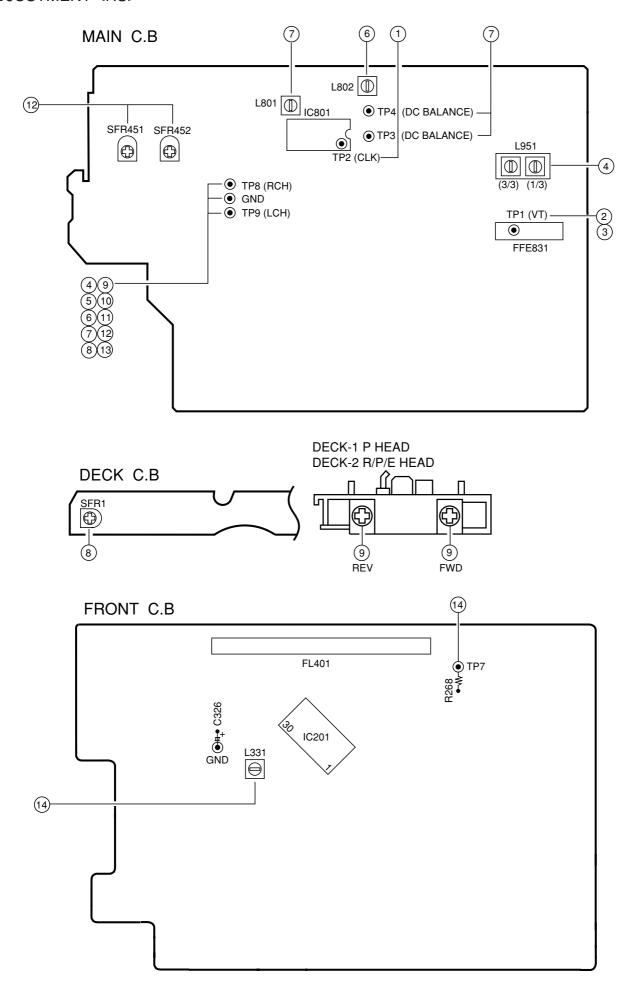
< FRONT SECTION >

16. μ-CON OSC Adjustment

Settings: • Test point: TP7 and GND

• Adjustment location : L331

Method : Insert AC plug while pressing POWER and TUNER function keys. Adjust L331 so that the frequency atthe test point is 153.84Hz $\pm\,0.15$ Hz.



< TUNER SECTION >

1. Clock frequency Check

Settings: • Test point: TP2

Method : Set to AM 1602kHz and check that the test point is $2052kHz\pm45Hz$.

2. AM VT Check

Settings: • Test point: TP1 (VT)

Method: Set to AM 1710kHz, 530kHz and check that the test point is less than 8.5V (1710kHz) and more than 0.6V (530kHz).

3. FM VT Check

Settings: • Test point: TP1 (VT)

Method: Set to FM 87.5MHz, 108.0MHz and check that the test point is more than 0.5V (87.5MHz) and less than 8.0V (108.0MHz).

4. AM Tracking Adjustment

Settings: • Test point: TP8(Lch), TP9(Rch)

• Adjustment location :

L951(1/3) 1000kHz

Method: Set to AM 1000kHz and adjust L951(1/3) so that the level at the test point becomes maximum.

5. FM Tracking Check

Settings: • Test point: TP8(Lch), TP9(Rch)

Method : Set to FM 98.0MHz and check that the test point is less than $9dB\mu V$.

6. AM IF Adjustment

Settings: • Test point: TP8(Lch), TP9(Rch)

• Adjustment location :

L802 1000kHz

7. DC Balance / Mono Distortion Adjustment

Settings: • Test point: TP3, TP4 (DC Balance)

: TP8(Lch), TP9(Rch) (Distortion)

• Adjustment location: L801

• Input level : $60dB\mu V$

Method : Set to FM 98.0MHz and adjust L801 so that the voltage between TP3 and TP4 becomes $0V \pm 0.3V$. Next, check that the distortion is less than 1.3%.

< DECK SECTION >

8. Tape Speed Adjustment (DECK 2)

Settings: • Test tape: TTA-100

• Test point : TP8(Lch), TP9(Rch)

• Adjustment location : SFR1

Method : Play back the test tape and adjust SFR1 so that the frequency counter reads $3000Hz \pm 5Hz$ and $\pm 45Hz$ (REV) with respect to forward speed.

9. Head Azimuth Adjustment (DECK 1, DECK 2)

Settings: • Test tape: TTA-330

• Test point : TP8(Lch), TP9(Rch)

• Adjustment location : Head azimuth

adjustment screw

Method: Play back (FWD) the 8kHz signal of the test tape and adjust screw so that the output becomes maximum. Next, perform on REV PLAY mode.

10. PB Frequency Response Check (DECK 1, DECK 2)

Settings: • Test tape: TTA-300

• Test point :TP8(Lch), TP9(Rch)

Method: Play back the 315Hz and 8kHz signals of the test tape and check that the output ratio of the 8kHz signal with respect to that of the 315Hz signal is within 5dB.

11. PB Sensitivity Check (DECK 1, DECK 2)

Settings: • Test tape: TTA-200

• Test point : TP8(Lch), TP9(Rch)

Method : Play back the test tape and check that the output level of the test point is $140 \text{mV} \pm 3 \text{dB}$.

12. REC/PB Frequency Response Adjustment (DECK 2)

Settings: • Test tape: TTA-602

• Test point : TP8(Lch), TP9(Rch)

• Input signal: 1kHz / 8kHz (LINE IN)

• Adjustment location : SFR451 (Lch)

SFR452 (Rch)

Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP8, TP9 becomes -20VU. Record and play back the 1kHz and 8kHz signals and adjust SFRs so that the output of the 8kHz signals becomes 0dB \pm 0.5dB with respect to that of the 1kHz signal.

13. REC/PB Sensitivity Check (DECK 2)

Settings: • Test tape: TTA-602

• Test point : TP8(Lch), TP9(Rch)

• Input signal : 1kHz (LINE IN)

Method: Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at TP8, TP9 becomes 0VU. Record and play back the 1kHz signals and check that the output is -2dB ± 3.0dB.

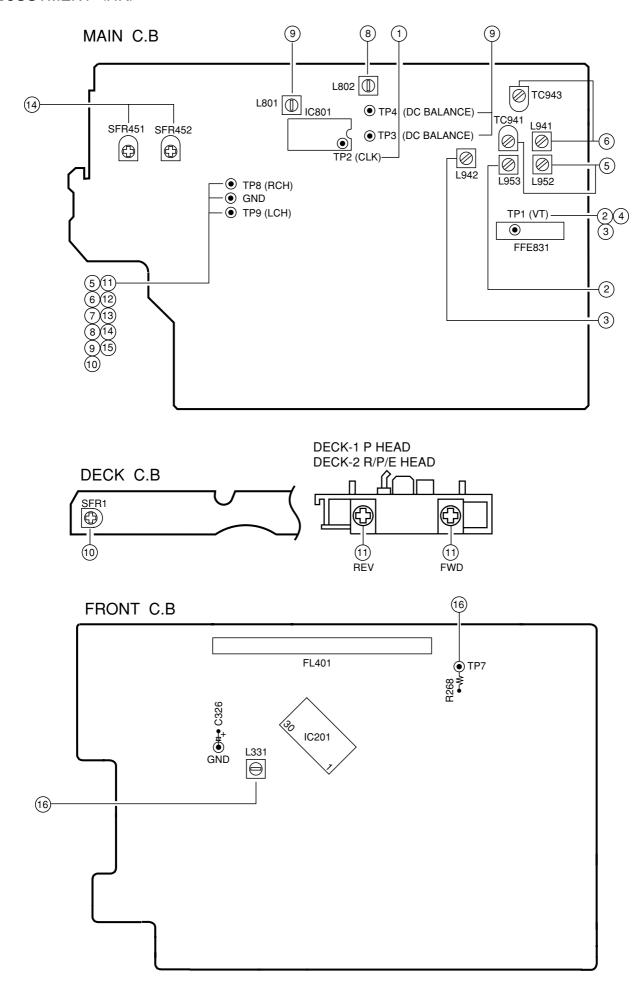
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14. u-CON OSC Adjustment

Settings: • Test point: TP7 and GND

• Adjustment location: L331

Method : Insert AC plug while pressing POWER and TUNER function keys. Adjust L331 so that the frequency at the test point is 153.84Hz $\pm\,0.15$ Hz.



< TUNER SECTION >

1. Clock frequency Check

Settings: • Test point: TP2

Method : Set to WM 1602kHz and check that the test point is $2052kHz \pm 45Hz$.

2. MW VT Adjustment

Settings: • Test point: TP1 (VT)

• Adjustment location: L953

Method : Set to MW 1710kHz, 530kHz and adjust L953 so that the test point is $8.0V\pm0.05V$ (1710kHz) and more than 0.3V (530kHz).

3. SW VT Adjustment

Settings: • Test point: TP1 (VT)

• Adjustment location: L942

Method : Set to SW 17.9MHz, 5.73MHz and adjust L942 so that the test point is $8.0V\pm0.05V$ (17.9MHz) and more than 0.3V (5.9MHz).

4. FM VT Check

Settings: • Test point: TP1 (VT)

Method: Set to FM 87.5MHz, 108.0MHz and check that the test point is more than 0.5V (87.5MHz) and less than 8.0V (108.0MHz).

5. MW Tracking Adjustment

Settings: • Test point: TP8(Lch), TP9(Rch)

• Adjustment location :

Method: Set to MW 603kHz and adjust L952 so that the level at the test point becomes maximum.

Next, set to MW 1404kHz and adjust TC941 so that the level at the test point becomes maximum.

6. SW Tracking Adjustment

Settings: • Test point: TP8(Lch), TP9(Rch)

• Adjustment location:

L941 5.9MHz TC943 17.9Mhz

Method: Set to SW 5.9MHz and adjust L941 so that the level at the test point becomes maximum.

Next, set to SW 17.9MHz and adjust TC943 so that the level at the test point becomes maximum.

7. FM Tracking Check

Settings: • Test point: TP8(Lch), TP9(Rch)

Method : Set to FM 98.0MHz and check that the test point is less than $9dB\mu V$.

8. AM IF Adjustment

Settings: • Test point: TP8(Lch), TP9(Rch)

• Adjustment location :

L802 999kHz

9. DC Balance / Mono Distortion Adjustment

Settings: • Test point: TP3, TP4 (DC Balance)

: TP8(Lch), TP9(Rch) (Distortion)

• Adjustment location: L801

• Input level : $60 dB \mu V$

Method : Set to FM 98.0MHz and adjust L801 so that the voltage between TP3 and TP4 becomes $0V\pm0.3V$. Next, check that the distortion is less than 1.3%.

< DECK SECTION >

10. Tape Speed Adjustment (DECK 2)

Settings: • Test tape: TTA-100

• Test point : TP8(Lch), TP9(Rch)

• Adjustment location : SFR1

Method : Play back the test tape and adjust SFR1 so that the frequency counter reads $3000\text{Hz} \pm 5\text{Hz}$ and $\pm 45\text{Hz}$ (REV) with respect to forward speed.

11. Head Azimuth Adjustment (DECK 1, DECK 2)

Settings: • Test tape: TTA-330

• Test point : TP8(Lch), TP9(Rch)

• Adjustment location : Head azimuth

adjustment screw

Method: Play back (FWD) the 8kHz signal of the test tape and adjust screw so that the output becomes maximum. Next, perform on REV PLAY mode.

12. PB Frequency Response Check (DECK 1, DECK 2)

Settings: • Test tape: TTA-300

• Test point :TP8(Lch), TP9(Rch)

Method: Play back the 315Hz and 8kHz signals of the test tape and check that the output ratio of the 8kHz signal with respect to that of the 315Hz signal is within 5dB.

13. PB Sensitivity Check (DECK 1, DECK 2)

Settings: • Test tape: TTA-200

• Test point : TP8(Lch), TP9(Rch)

Method : Play back the test tape and check that the output level of the test point is $140 \text{mV} \pm 3 \text{dB}$.

14. REC/PB Frequency Response Adjustment (DECK 2)

Settings: • Test tape: TTA-602

• Test point : TP8(Lch), TP9(Rch)

• Input signal: 1kHz / 8kHz (LINE IN)

• Adjustment location : SFR451 (Lch)

SFR452 (Rch)

Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP8, TP9 becomes -20VU. Record and play back the 1kHz and 8kHz signals and adjust SFRs so that the output of the 8kHz signals becomes 0dB $\pm\,0.5\text{dB}$ with respect to that of the 1kHz signal.

15. REC/PB Sensitivity Check (DECK 2)

Settings: • Test tape: TTA-602

 $\bullet \ Test \ point: TP8(Lch), \ TP9(Rch)$

• Input signal : 1kHz (LINE IN)

Method: Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at TP8, TP9 becomes 0VU. Record and play back the 1kHz signals and check that the output is -2dB ± 3.0dB.

< FRONT SECTION >

16. μ-CON OSC Adjustment

Settings : \bullet Test point : TP7 and GND

• Adjustment location: L331

Method : Insert AC plug while pressing POWER and TUNER function keys. Adjust L331 so that the frequency at the test point is 153.84Hz $\pm\,0.15$ Hz.

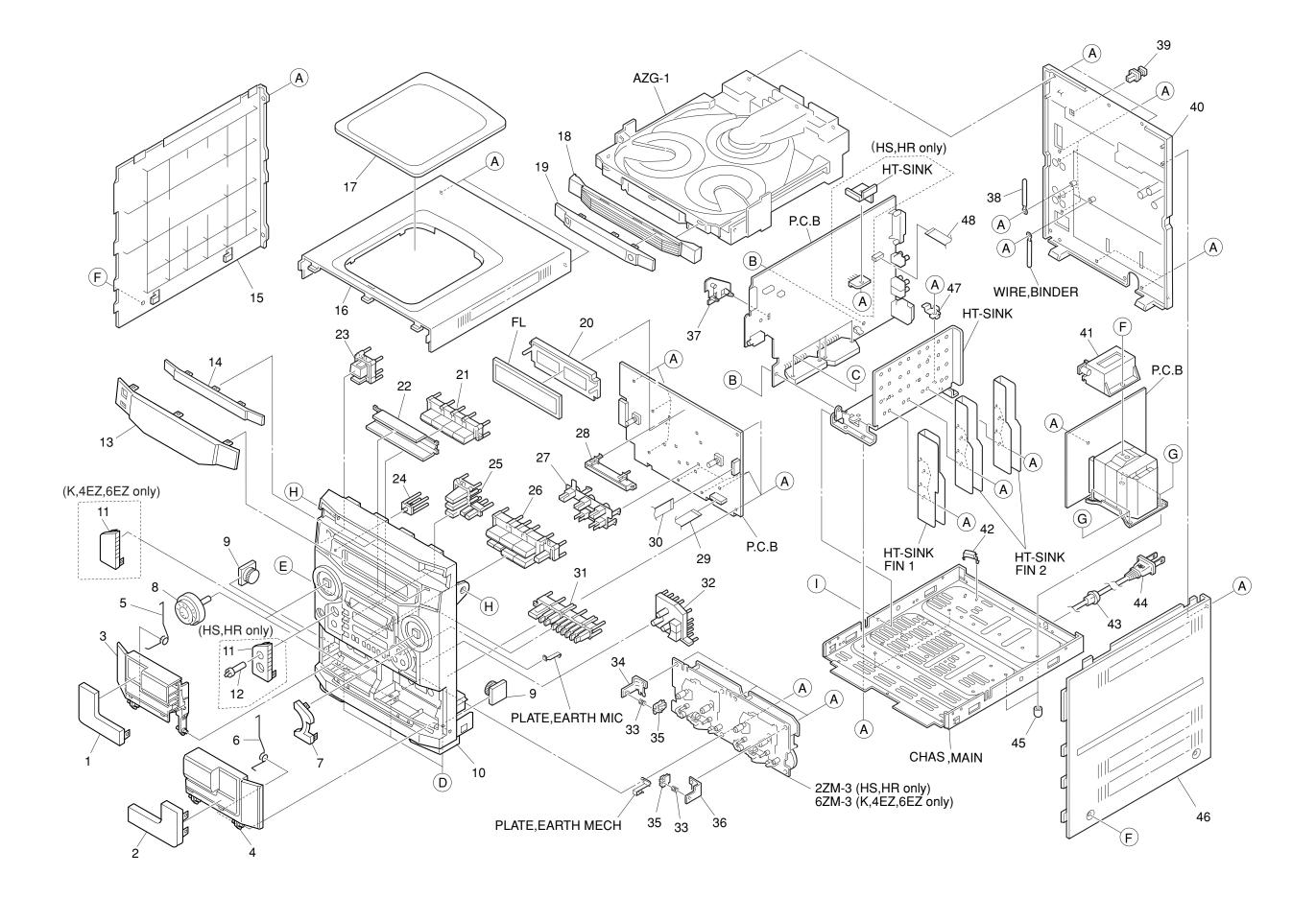
MECHANICAL MAIN PARTS LIST 1/1

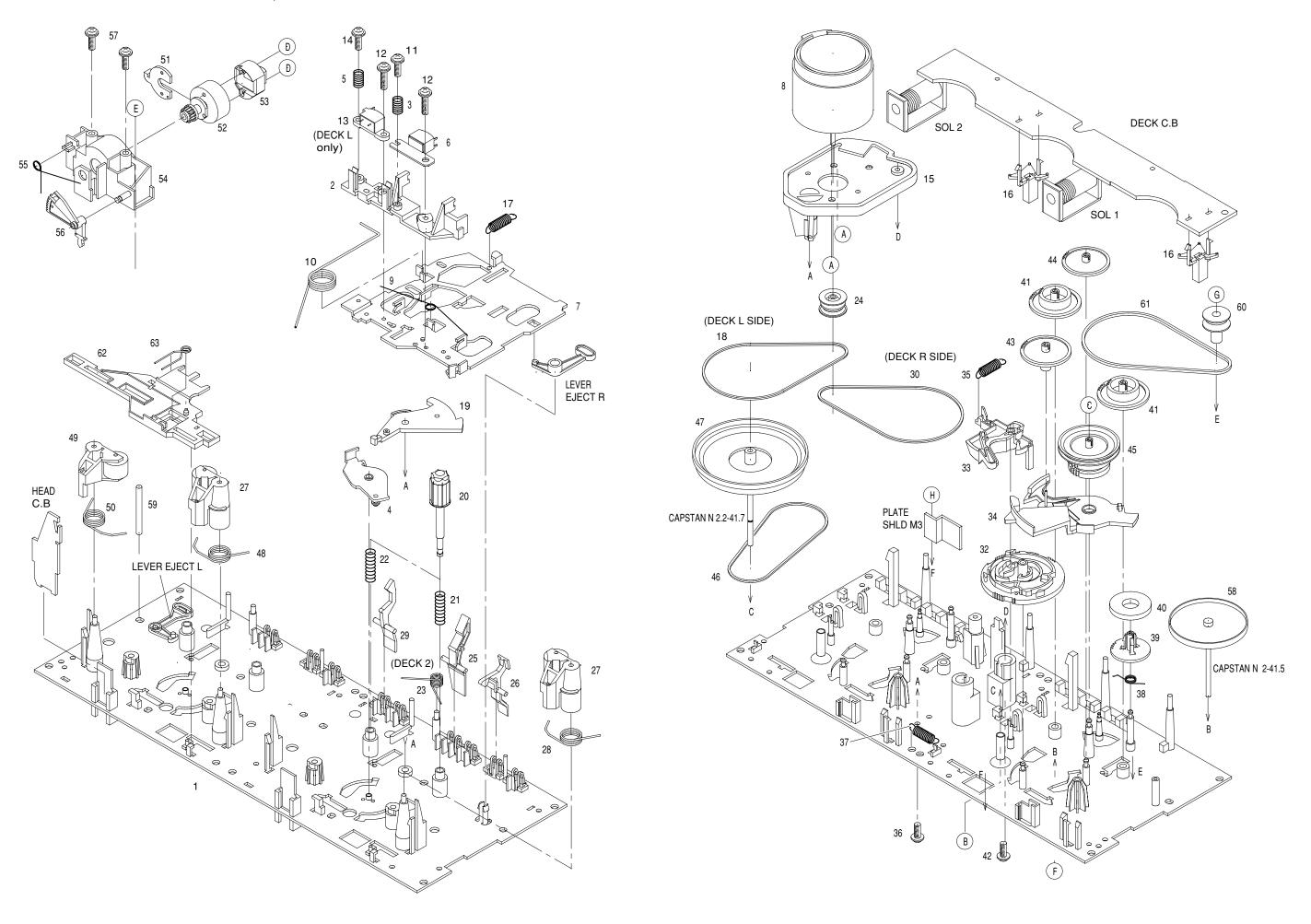
DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。 If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO		NRI DESCRIPTION O.	REF. NO	PART NO.	KANRI DESCRIPTION NO.
1	8A-NFJ-012-010	WINDOW, CASS 1	31	8A-NFJ-030-010	KEY,CD EDIT H <hs,hr></hs,hr>
2	8A-NFJ-013-010	WINDOW, CASS 2	31	8A-NFJ-025-010	KEY,CD EDIT U <k,4ez></k,4ez>
3	8A-NFJ-035-010	BOX, CASS 1H	32	8A-NFJ-027-010	KEY, DISC
4	8A-NFJ-003-010	BOX, CASS 2 U <k, 4ez,="" 6ez=""></k,>	33	86-NF9-224-010	
4	8A-NFJ-036-010	BOX, CASS 2H <hs, hr=""></hs,>	34	87-NF4-216-010	HLDR, LOCK 1
5	8A-NF8-207-010	SPR-T,EJECT 1 <k,4ez,6ez></k,4ez,6ez>	35	82-NF5-229-010	
5	82-NF5-218-010	SPR-T, EJECT 1(SIN) <hs, hr=""></hs,>		87-NF4-217-110	
6	8A-NF8-208-010	SPR-T,EJECT 2 <k,4ez,6ez></k,4ez,6ez>		8A-NF8-206-010	
	82-NF5-219-010	SPR-T,EJECT 2(SIN) <hs,hr></hs,hr>		87-064-185-010	•
7	8A-NFJ-005-010	WINDOW, FR 2	39	84-ZG1-245-210	CAP,OPTICAL
8	8A-NFJ-017-010	KNOB, RTRY JOG	40	8A-NFJ-065-010	
9	8Z-NF6-210-010	DMPR,150 N <hs,hr></hs,hr>	40	8A-NFJ-066-010	
9	8A-NF8-209-010	OIL-DMPR,120 <k,4ez,6ez></k,4ez,6ez>	40	8A-NF8-075-110	
10	8A-NFJ-044-010	CABI, FR 54E <k, 4ez=""></k,>		8A-NFJ-064-010	
10	8A-NFJ-034-010	CABI,FR E<6EZ>	41	8A-DB8-209-010	HLDR, PWB PT
10	8A-NFJ-033-010	CABI,FR H <hs,hr></hs,hr>	42	87-NF4-221-010	HLDR, CABLE
11	8A-NFJ-004-010	WINDOW, FR 1 <k, 4ez,="" 6ez=""></k,>	<u> </u>	87-085-185-010	BUSHING, AC CORD(E) CM-22B
11	8A-NFJ-006-010	WINDOW, FR 1H <hs, hr=""></hs,>	↑ 43 ↑ 44 ↑ 44 ↑ 44	87-A80-143-010	AC CORD ASSY, E BLK <k></k>
12	8A-NFJ-026-010	KNOB, RTRY MIC <hs, hr=""></hs,>	<u>↑</u> 44	87-A80-157-010	AC CORD ASSY, E BLK CC <hr/>
13	8A-NFJ-040-010	WINDOW, DISP E<6EZ>	<u>↑</u> 44	87-A80-092-010	AC CORD ASSY, E BLK SUN FAI<4EZ,6EZ>
13	8A-NFJ-039-010	WINDOW, DISP H <except 6ez=""></except>	⚠ 44	87-A80-155-010	AC CORD ASSY, HS TS <hs></hs>
14	8A-NFJ-008-010	WINDOW, CD	45	8Z-NB8-240-010	
15	8A-NF8-007-010	PANEL, LEFT V-2	46	8A-NF8-008-010	PANEL, RIGHT V-2
16	8A-NF8-005-010	PANEL, TOP	47	8A-NF8-205-010	
17	8A-NF8-006-010	WINDOW, TOP	48	88-906-251-110	FF-CABLE.6P 1.25
18	8A-NFJ-009-010	PANEL, TRAY	A	87-067-703-010	•
19	8A-NFJ-010-010	WINDOW, TRAY		87-NF4-224-010	· · · · · · · · · · · · · · · · · · ·
20	88-NF8-205-010	GUIDE, FL		87-067-581-010	
	8A-NFJ-018-010	KEY, FUN		87-067-688-010	
22	8A-NFJ-016-010	REFLECTOR, FUN	Е	87-723-096-410	QT2+3-10 W/O SLOT BLK
23	8A-NFJ-014-010	KEY, POWER		87-067-641-010	
24	8A-NFJ-015-010	REFLECTOR, ECO		87-078-191-010	,
	8A-NFJ-019-010	KEY,GEQ		87-721-097-410	
	8A-NFJ-029-010	KEY, ASSY OPE REV	I	87-721-096-410	QT2+3-10 W/O SLOT
27	8A-NF8-203-010	GUIDE, OPE REV			
28	8A-NF8-201-010	GUIDE, FUN			
29	88-911-101-110	FF-CABLE,11P 1.25 <k,4ez,6ez></k,4ez,6ez>			
	88-915-101-110	FF-CABLE.15P 1.25 100MM <hs,hr></hs,hr>			
	88-913-301-110	FF-CABLE,13P-1.25			
31	8A-NFJ-031-010	KEY,CD EDIT E<6EZ>			

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
В	Black	С	Cream	D	Orange
G	Green	Н	Gray	L	Blue
LT	Transparent Blue	N	Gold	Р	Pink
R	Red	S	Silver	ST	Titan Silver
Т	Brown	V	Violet	W	White
WT	Transparent White	Υ	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange	PT	Transparent Pink





MECHANISM MAIN PARTS LIST 1/1 <EZ, K: 6ZM-3 PR2NM>

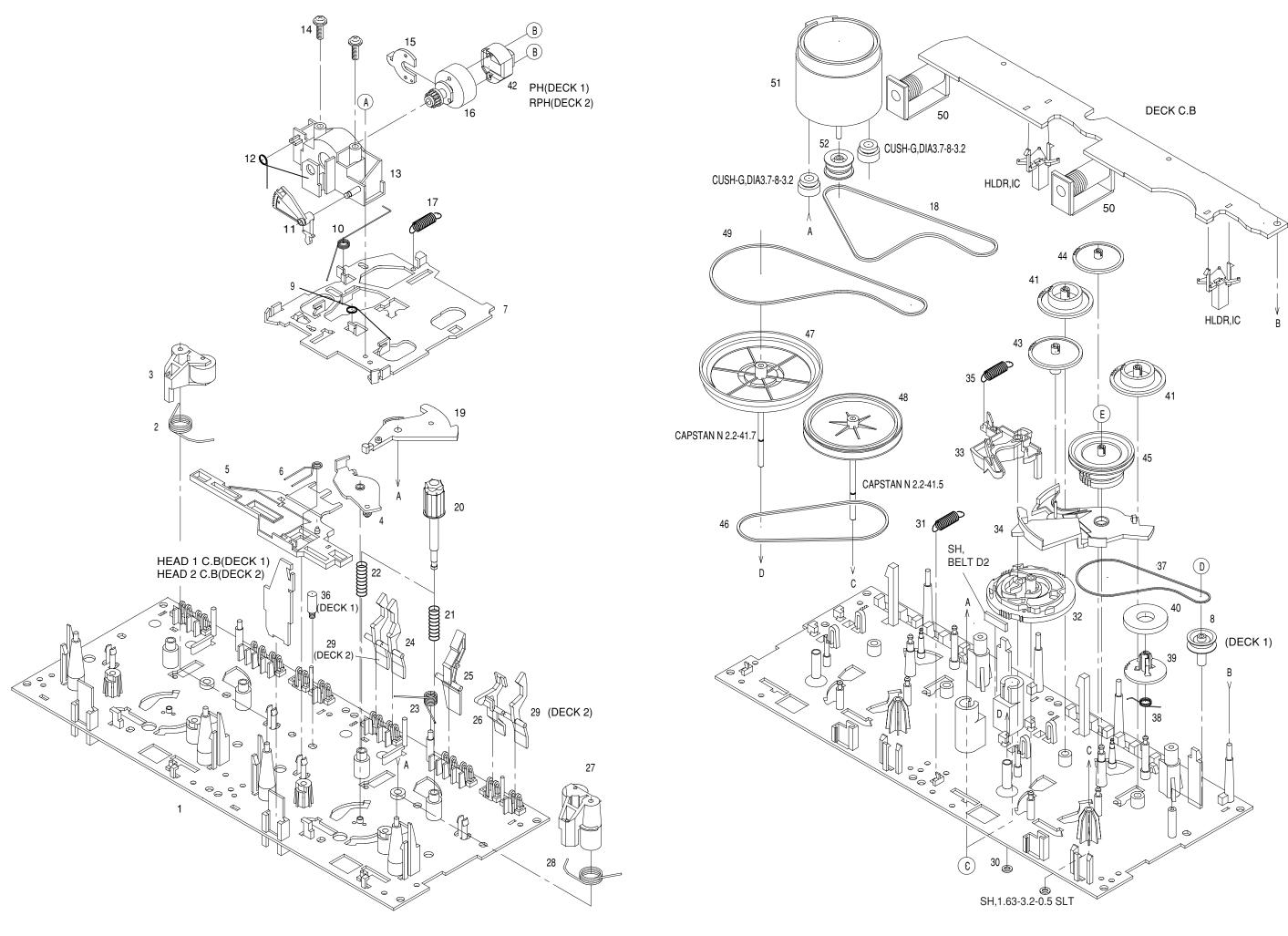
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2 3 4	86-ZM3-215-01 86-ZM3-202-01 86-ZM3-205-01 82-ZM1-333-21 86-ZM3-206-01	0 BASE,HE 0 SPR-C,R 0 PLATE,L	AD S PH S INK 2	42 43 44	82-ZM1-216-31 86-ZM3-213-01 82-ZM1-225-21 82-ZM1-226-01 82-ZM3-333-31) S-) GE) GE	SAR,REEL -SCREW,HLDR,MOT 3 SAR,FR SAR,REW JIP DISK ASSY 2
7 7 8	87-A90-403-01 86-ZM3-201-01 82-ZM3-206-21 87-045-347-01 82-ZM1-269-21	O CHAS, HE. O BELT, R O MOT, SHU	AD S(DECK L) 2L 70(M1)	47 47 48	82-ZM1-338-01 82-ZM1-349-01 82-ZM3-338-01 82-ZM1-259-21 82-ZM1-341-11	O FL O FL O SF	ELT FR4 LY-WHL RW (DECK L) LY-WHL R3W (DECK R) PR-T,PINCH R /R ASSY,PINCH L2
11 12 13	82-ZM1-219-11 86-ZM3-209-01 86-ZM3-207-01 87-A90-404-01 86-ZM3-208-01	0 S-SCREW 0 S-SCREW 0 HEAD,EH	,ASIMUTHS ,RPH LE15B	51 52 53	82-ZM1-258-21 82-ZM1-314-11 82-ZM1-208-31 87-A90-366-01 82-ZM1-207-81) PI) HI) HE	PR-T,PINCH L JATE,HEAD JDR,HEAD EAD,PH YK50P-BF414 JIDE TAPE
16 17 18	86-ZM3-203-01 82-ZM1-245-21 82-ZM1-218-01 86-ZM3-214-01 82-ZM1-222-21	0 HLDR,IC 0 SPR-E,H: 0 BELT,SU	3 3 RR	56 57 58	82-ZM1-213-01 82-ZM1-210-11 86-ZM4-206-01 82-ZM1-348-01 82-ZM3-339-01) GE) S-) FL	PR-T,HEAD EAR,HT -SCREW AZIMUTH L -Y-WHL,LW HAFT,COUPLER N3
21 22 23	82-ZM1-217-41 82-ZM1-244-51 82-ZM1-285-41 82-ZM1-257-01 82-ZM3-221-01	0 SPR-C,B' 0 SPR-C,B' 0 SPR-T,C	Г Г L AS	61 62 63	82-ZM3-335-21 86-ZM1-206-01 82-ZM1-266-11 82-ZM1-214-01 87-251-071-41	D BE D LV D SF	JLLEY,COUPLER M3 ELT,MAIN L VR,DIR PR-T,DIR +2.6-4
26 27 28	82-ZM1-242-01 82-ZM1-243-01 82-ZM1-344-11 86-ZM3-204-01 82-ZM1-240-11	0 LVR,STO 0 LVR ASS 0 SPR-T,P		C D E	80-ZM6-243-01 82-ZM3-334-01 80-ZM6-207-01 85-ZM3-202-01 82-ZM1-288-01) PW) V+) S-	I,1.75-3.6-0.5 SLT N,2.16-6-0.4 -1.6-7 -SCREW TG H,1.63-3.2-0.5 SLT
32 33 34	86-ZM3-210-01 82-ZM3-305-11 82-ZM1-227-31 82-ZM3-306-11 82-ZM1-265-11	O GEAR, CAI O LVR, TRI O LVR, FR	Э M2		87-B10-043-01 87-571-032-41		P,0.99-4-0.25 SLT T+2-3
37 38 39	87-761-073-41 82-ZM1-255-31 82-ZM1-322-01 82-ZM1-220-21 82-ZM3-616-01	0 SPR-E,L 0 SPR-T,F 0 GEAR,ID	R60 LER				

MECHANISM MAIN PARTS LIST 1/1 <HS, HR: 2ZM-3MK2 PR4NM>

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。 If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

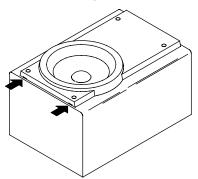
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1	82-ZM3-301-610	CHAS ASSY, M2	31	82-ZM1-255-310	SPR-E,LVR DIR
2	82-ZM1-258-210	SPR-T, PINCH L	32	82-ZM3-305-210	GEAR, CAM M2
3	82-ZM1-341-210	LVR ASSY, PINCH L2	33	82-ZM1-227-310	LVR, TRIG
4	82-ZM1-333-210	PLATE, LINK2	34	82-ZM3-306-110	LVR,FR M2
5	82-ZM1-266-310	LVR, DIR	35	82-ZM1-265-310	SPR-E, TRIG
	82-ZM1-214-010			82-ZM3-339-110	
	82-ZM1-206-910			86-ZM1-206-010	
	82-ZM3-335-310			82-ZM1-322-010	
	82-ZM1-269-210			82-ZM1-220-210	
10	82-ZM1-219-110	SPR-T, LINK	40	82-ZM3-616-010	RING MAGNET 4
11	82-ZM1-210-110	GEAR, H T	41	82-ZM1-216-410	GEAR, REEL
	82-ZM1-213-010			87-A90-820-010	
13	82-ZM1-207-910	GUIDE, TAPE	42	87-A90-821-010	HEAD, RPH HADKH56 FPC
14	86-ZM4-206-010	S-SCREW, AZIMUTH L	43	82-ZM1-225-210	GEAR, FR
15	82-ZM1-314-110	PLATE, HEAD	44	82-ZM1-226-010	GEAR, REW
	82-ZM1-208-310			82-ZM3-333-310	
	82-ZM1-218-010			82-ZM1-338-110	
	82-ZM3-342-010			82-ZM1-349-110	
	82-ZM1-222-210			82-ZM1-348-110	
20	82-ZM1-217-410	REEL TABLE	48	82-ZM3-338-310	FLY-WHL,R3W
	82-ZM1-244-510			82-ZM3-329-410	
	82-ZM1-285-410			82-ZM1-618-410	
	82-ZM1-257-010			87-045-347-010	
	82-ZM1-241-310				PULLEY, MOT 2M
25	82-ZM1-242-010	LVR, CAS	A	85-ZM3-202-010	S-SCREW, TG
26	82-ZM1-243-010	LVR,STOP	В	80-ZM6-207-010	V+1.6-7
27	82-ZM1-344-010			82-ZM3-318-110	
28	82-ZM1-259-210	SPR-T, PINCH R	D	87-B10-043-010	W-P,0.99-4-0.25 SLT
29	82-ZM1-240-110	LVR, REC(*)	E	82-ZM3-334-010	PW 2.16-6-0.4
30	80-ZM6-243-010	SH 1.75-3.6-0.5 SLT			



SPEAKER DISASSEMBLY INSTRUCTIONS

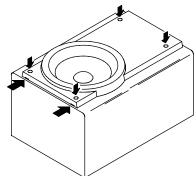
Type.1

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.



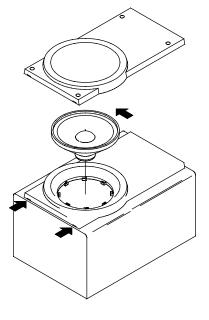
Type.2

Remove the grill frame and four pieces of rubber caps by pulling out with a flat-bladed screwdriver. Remove the screws from hole where installed rubber caps. Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.

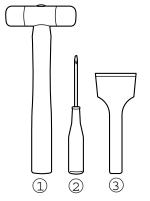


Type.3

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Turn the speaker unit to counter-clockwisedirection while inserting a flat-bladed screwdriver into one of the hollows around speaker unit, and then remove the speaker unit. After replacing the speaker unit, install it turning to clockwise direction until "click" sound comes out.



Type.4

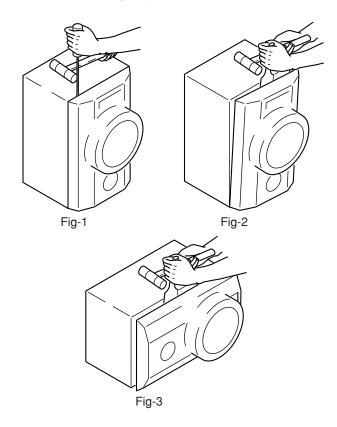


TOOLS

- 1 Plastic head hammer
- (2) ((=)) flat head screwdriver
- (3) Cut chisel

How to Remove the PANEL, FR

- Insert the (○) flat head screwdriver tip into the gap between the PANEL, FR and the PANEL, SPKR. Tap the head of the (○) flat head screwdriver with the plastic hammer head, and create the clearance as shown in Fig-1.
- Insert the cut chisel in the clearance, and tap the head of the cut chisel with plastic hammer as shown in Fig-2, to remove the PANEL, FR.
- 3. Place the speaker horizontally. Tap head of the cut chisel with plastic hammer as shown in Fig-3, and remove the PANEL, FR completely.



How to Attach the PANEL, FR

Attach the PANEL, FR to the PANEL, SPKR. Tap the four corners of the PANEL, FR with the plastic hammer to fit the PANEL, FR into the PANEL, SPKR completely.

SPEAKER (SX-WNBL56) <56EZ> PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。 If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8A-NS5-016-0	10 PAN	EL,FR U
2	8A-NS5-017-03	10 PLA	TE,NAME B
3	8A-NS5-004-01	10 PAN	EL, DUCT
4	8A-NS5-009-03	10 PRO'	TECTOR,
5	8A-NS5-018-03	10 GRI	LLE, FRAME ASSY RDS
6	8A-NS5-015-0	10 BAD	GE,AIWA S35
7	8Z-NSY-003-03	10 COR	D,BUSH
8	88-NS3-029-03	10 COR	D,BUSH L
9	88-NS5-610-03	10 COR	D,SPKR
10	88-NS5-611-0	10 COR	D,SPKR B/L
11	8Z-NSY-608-03	10 SPK	R, CERAMIC ASSY
12	8A-NS8-604-03	10 SPK	R, M 100
13	8Z-NS7-602-03	10 SPK	R, W 160

SPEAKER (SX-WNBL53) < Except 56EZ > PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。 If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8A-NS5-016-0	010 PAN	EL,FR U
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5	8A-NS5-012-0	010 GRI	LLE, FRAME ASSY U
6	8A-NS5-015-0	010 BAD	GE,AIWA S35
	8Z-NSY-003-0		D,BUSH
8	88-NS3-029-0	010 COR	D,BUSH L
9	88-NS5-610-0		D,SPKR
10	88-NS5-611-0	010 COR	D,SPKR B/L
11	8Z-NSY-608-0	010 SPK	R, CERAMIC ASSY
12	8A-NS8-604-0	010 SPK	R, M 100
13	8Z-NS7-602-0	010 SPK	R, W 160

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